

# The Science of a Happy Home Briefing for Policymakers

Note to reader:

This document is a supplementary document to Resi's 2020 report, 'The Science of a Happy Home'. Our report provides the public with a guide to our research findings and what it means for how they live in their homes. The full report can be downloaded [here](#).

A Literature Scan Summary, Methodology, Industry Insights paper and a copy of the national data set used to develop these findings can be found [here](#).

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This document consists of three parts:

## Part 1 – Research Overview

Introducing the scope of the research, our aims and introducing key findings which are centred around six qualities that make for happy homes.

## Part 2 - Policy Thrusts: Six qualities of the happy home

Detailing how our key findings relate to the policy regimes and current debates.

## Part 3 - Our Policy Perspective

A working policy perspective, consisting of a top line recommendation and suggested policy response in relation to our findings.

## Part 1 – Research Overview

The Science of a Happy Home is a project about how the design and the use of our homes influences our wellbeing. It has been spearheaded by Resi, the UK's leading architecture practice for everyday homeowners.

As a first step, Resi commissioned an independent<sup>1</sup>, exploratory enquiry to highlight credible evidence on how the design and use of our homes relates to our happiness and wellbeing. Resi's ambition is for this body of research and insight to grow over time. Further research to look at revealed preference and qualitative engagement with multiple members of the household are two clear avenues for this.

This research synthesises and summarises existing evidence and, combined with original findings based on subjective survey data, we suggest insights to apply to the diverse practices of how we build and improve our homes.

A national survey of 4000 UK adults was administered by Populus in August 2019, building a dataset that links to established benchmarks such as the English Housing Survey, as well as providing new correlates for subjective wellbeing at home.

As part of this survey, the public were asked to describe their homes using the OCEAN framework, a personality framework widely used by psychologists. We presented people with ten home personality traits through which to describe their homes. From this we learnt that how we describe our home correlates significantly with how happy we feel at home. These findings underpin our six qualities to define a happy home.

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<sup>1</sup> The research was undertaken between August and September 2019 by the Underdog Collective - a diverse group of researchers, strategists and designers who bring rich local and international perspectives to their specialist domains of architecture, statistics, wellbeing and geography. A breakdown of contributors can be found in the main report.

## Our Aims - Why Resi are focused on Happy Homes

To make architecture and design accessible. This isn't about aesthetics, it's about the real benefits you can get from applying a different way of thinking to your home. This challenges some of our cultural tendencies to accept things the way they are. We discuss changes, big and small to broaden the conversation.

To further our understanding of the changes people can make to create happier homes. Lots of research demonstrates what we should not do to our homes, establishing causality between poor design and ill health, or negative social and environmental outcomes. By contrast, evidence on what we might aspire to is under explored: homes that make us happy.

To look behind the front door, rather than focus beyond the front door. There has been significant research to understand how our neighbourhoods, streets, towns and cities shape our wellbeing. At this scale there is more data available and interactions are easily observable. It is more difficult, but equally important, to look at the private and intimate ways we use our homes.

Our findings centre on six qualities to focus our attention on how to create happy homes by putting greater emphasis on the residents and the social interactions that take place in them. These six qualities give us a focus around which we can, for the first time, have a national conversation about how our homes perform for our wellbeing.

The six qualities of the Happy Home

**SECURE** provides shelter, safety and stability

**NOURISHING** provides healthy conditions

**ADAPTABLE** can meet changing needs

**RELAXED** makes us feel at home

**CONNECTED** provides space to interact

**MIRRORS** reflect who we are

The full report can be downloaded [here](#).

## Part 2 - Policy thrusts: Six qualities of the happy home

### SECURE provides shelter, safety and stability

Our data reveals that it is wrong to assume the security offered by home ownership can guarantee our happiness; rather it is the insecurity of renting that can hold us back. For example, on the surface, renters look less happy than owners, but the reason that they are less happy is not because they live in flats, it's because they're more likely to be renting. Those who own their flat are just as happy as those that live in terraced houses. **Differences in home satisfaction among the various housing typologies are in many datasets inflated by the tenure gradient of housing type.** This is important to remember where planning policy relates to housing typologies. This is consistent with the government's English Housing Survey data.

The evidence suggests it is the **stability of tenure that's most important.** This shows that **renting need not be detrimental for life satisfaction or home satisfaction.** Private renters move eight times as often as homeowners and five times as often as social renters. In our data, 52% of those privately renting expected to move within three years as opposed to 19% of those who rent from the council or housing associations. This is supported by the findings of others, such as [Shelter's Living Home Standard](#), which outlines that it is the control over your tenure status that's important.

Security of tenure has broad appeal. Our data shows that **55% of the public believe the government should require landlords to offer rental contracts which cover two years of tenancy as standard.**

### NOURISHING provides healthy conditions

We found that **Londoners were more likely to be dissatisfied with the temperatures of their homes in the summer months, than other parts of the UK.** The effect of feeling dissatisfied with summer temperatures was sufficiently large that it was equal in scale to the overall statistical variance between London's lower home satisfaction scores and the UK average. This raises questions about how we ventilate (and insulate) our homes in the capital.

For certain elements of home environments, such as **acoustic standards**, the **post-occupancy monitoring regime has driven better building performance** through objective testing which

creates the prospect of robust enforcement of planning conditions. A similar approach to post occupancy monitoring could be applied to other areas to drive standards.

Office to residential conversions are increasingly common under **Permitted Development Rights** and there is growing evidence that these homes may limit wellbeing outcomes through poorer access to light, windows, air quality, sound proofing or outdoor space. Our findings support this: we found that living in a converted commercial building or living in temporary accommodation has a negative impact on home satisfaction. Our sample was not large enough to determine any differential effect between owners and renters in this case. This is a deeply contested area which requires significant attention.

Homes that are nourishing provide us with conditions to be comfortable. The recent announcement by the Housing Secretary, Robert Jenrick to update the government's model tenancy contract for renters in support of well behaved pets, is a welcomed move.

### **ADAPTABLE can meet changing needs and MIRRORS reflect who we are**

As we age, our needs change but our homes don't - unless we change them or move home. In our data, **92% of those most happy at home agree that their house met their needs, while only 20% of those most unhappy at home feel this.** This gives even **more importance to the adaptability of our homes** to work both in response to the rhythm of the day and over the longer-term. Whilst our research did not quantify space in m2 (we took a room inventory) we recognise the pre-eminence of space standards - see Julia Park's 100 Years of Space Standards.

Open plan spaces, and new open plan spaces in particular, are invariably smaller than if three rooms were provided. There is no true adaptability if you *can* move furniture around, but you *cannot* create partitions or increase privacy comfortably. This is something we need to consider in the context of adaptability and future use. And in an ageing society where people will live longer with limiting conditions, adaptability will become more valued and more valuable.

Adaptability concerns the personalisation of space and the ways in which you can **mould your space to mirror your personality and values**. Personalising spaces so they feel like your own helps you to feel more comfortable and at home. Our data supports this - **67% of the public agree that private renting tenants should have greater rights when it comes to personalising their space e.g. hanging pictures on walls.**

## **RELAXED makes us feel at home and CONNECTED provides space to interact**

When we look at the spaces of the home, once income and other demographic factors are controlled for, **private gardens, balconies and open plan spaces are the three most desirable spaces**. Not everyone has these features, but where they do, we see a **strong correlation with higher home satisfaction**. It is important to note that we stipulated that a **balcony had to have enough space to sit on**.

We need places to switch on and be sociable as well as to switch off and relax. All these spaces can **enhance our feelings of connectedness** - to each other, to nature and the outside world. Feeling connected to the outside world through views, gardens and balconies can help relieve stress, enhance comfort and promote healthy lifestyles.

Having a private garden is marginally more important for those with children aged 0 to 10 and whilst having a shared garden was not generally beneficial for home satisfaction, it was significantly more beneficial for those with children aged 0-4. In our data, **more than half of respondents with young children who lived in purpose-built flats had access to no garden whatsoever**.

Balconies are even more important for home workers. In our data, **those home workers who had balconies had a home satisfaction 1.1 points higher than those that didn't** – the only significant effect from this question when looking only at home workers. Recognising that having a balcony and living in a flat often co-occurs, we carried out a regression to test whether considering both questions at the same time would make one redundant in predicting home satisfaction. Even when considered simultaneously, both effects were large and significant. This suggests **we need a better understanding of the benefits of balconies**.

## Part 3 - Our Policy Perspective

When we talk about housing trends, too often, the debates are limited to the size and volume of new homes. A much **broader set of considerations** should be **influencing the way we design, renovate and retrofit to ensure quality homes that secure wellbeing outcomes**. This is starting to happen. The imminent release of the Building Beautiful Building Better Commission (BBBBC) recommendations to support a high-quality design approach to new builds, and the National Design Guide's focus on creating healthy, safe and comfortable internal and external environments is a key part of the discussion.

Our findings, laid out in the full report can be seen as important, whether these are applied to large scale new development or small-scale infill, new build or retrofit. In developing our qualities of the happy home, we have identified the potential for national and local policy, as well as regulatory changes, to better support the wellbeing performance of our housing stock.

### Top Line Recommendation

**Recommendation 1 - Development and implementation of a consumer friendly, standardised housing performance measure for wellbeing.**

A gap exists for an accessible consumer friendly measure, like the Energy Performance Certificate (EPC). This could combine objective data (that links housing typology and specification where these have proven links to well-being), with both pre and post-occupancy evaluation where subjective data indicates how homes function from the point of view of the people who actually live in them.

Examining the existing accreditations and certifications that relate to wellbeing at home, as well as alternatives such as the Essex County Council's Livewell Development Accreditation, provides a starting point for a discussion about how we might achieve this.

## Suggested Policy Response

The recommendations laid out below are a starting point and are **limited in scope to what our research supports most directly**. For this reason, our approach is **most relevant to household and minor developments**.

There is significant complexity surrounding policy and regulatory regimes. **Resi welcomes collaboration with policy makers and industry to unpick, debate and refine** - in order to build the case.

### Permitted Development Rights

**Recommendation 2 - Permitted Development requirements should be extended to ensure wellbeing outcomes.**

Permitted Development has a specific set of requirements that a development has to adhere to. These requirements should be extended beyond transport and highways assessment, contamination and flooding risks (Outlined in PA.2) with a review to cover additional technical parts of the Building Regulations, space standards, and access to local amenities. These requirements should consider what is relevant and necessary to the type of Permitted Development change. For example, in the case of office to resi conversions, access to local amenities and outdoor space, is crucial. Whereas, for loft conversions this would not be appropriate.

#### Context

The disharmony between the need to build volume and to build with our wellbeing in mind is exposed through regulation, such as Permitted Development Rights.

As it stands, Permitted Development doesn't work. Industry **unanimously agrees that Permitted Development is allowing the creation of sub-standard homes**, through **office to residential conversions** in particular. There is also acknowledgement that when it comes to amendments and extensions, the rights can lead to **undue risk being placed on the consumer**.

But rather than simply revoking these rights, at a time when we critically need more development and greater freedom for adaptability of our homes, we need to re-think how these rights might better work for the public.

### **The potential of certification to achieve this**

Given the significant resource constraints faced by Planning Authorities to undertake this, it may be possible to **certify professionals to issue standardised Lawful Development Certificates**. There is precedent for this as it has already been done with Building Regulations, where Approved Inspectors are now privatised and certify completion and sign off compliance.

Professionals could also be certified to **review Permitted Development schemes and approve an application for works, pre-development or works, in accordance with rights**. Agents could check development conforms to revised Permitted Development requirements. These checks could be done with drawings, inputs provided in another form and/or site visits.

### **Reducing consumer exposure**

Certification, particularly where professionals are engaged in approving an application pre-development will greatly reduce exposure to the consumer.

Consumers currently looking to do amendments or extensions under Permitted Development can end up working with builders who do not ensure their works meet requirements, and or may not design their space with their wellbeing front and centre. In the worst cases, consumers have to re-do work upon completion through enforcement, if, for example a neighbour then makes a complaint and the development does not conform to policy.

**Model contracts for those looking to undertake works under Permitted Development** could be drafted, so that consumers can further better protect themselves when undertaking works.

## Building Regulations

### **Recommendation 3 - Ensure that basic needs are always met through Building Regulations**

- Materials Performance - Part 7 Amendments
  - Amend to drive adoption of greener materials with desirability clauses being placed on sustainable and local materials.
  - An ambitious approach would be for this to cover all amendments and extensions over 100m<sup>2</sup> (net add'l gross internal floorspace) - in addition to new builds.
- Category 2 of Part M to become the minimum standard (subject to concessions when step-free access is not practical)
  - This would ensure all people can safely and independently gain access to a building - enhancing both accessibility and long-term adaptability where feasible.
  - An ambitious approach would be for this to cover all amendments and extensions over 100m<sup>2</sup> (net add'l gross internal floorspace) - in addition to new builds.
- Sound - Part E Additions
  - An Addition to Part E, as there are currently no minimum requirements for vibration and air transfer for existing stock (only for new builds).
  - Evidence could be gathered and reviewed to consider the benchmark for reasonable resistance in the case of existing stock.
- Conservation of Fuel and Power - Part L Amendments
  - There is an opportunity to enforce that when homeowners are developing or transforming a property there is an increase to the minimum U Value standard requirement.
  - This change would require homeowners to add upgrades which achieve a better standard of thermal efficiency, and conserve energy costs.

### **The case for a broader Building Regulations review:**

Our findings support the [APPG for Healthy Homes and Buildings](#) conclusion that future reviews of Building Regulations should require that the *'health of a building's occupants is fully considered alongside the necessary technical measures included to protect health and enhance wellbeing.'*

Achieving this is challenging for several reasons, not least because of the complex interdependencies that exist between the physical and environmental characteristics that impact our wellbeing.

For example, daylight is not currently specified by Building Regulations, yet it interacts with many other physical and environmental characteristics relating to our wellbeing (for example - views, soundproofing, windows, access to outdoor space, ventilation and indoor air quality). Some of these, such as soundproofing, are covered by Building Regulations.

However, a broader understanding, and accounting for the links between these characteristics is vital, where relevant, if we are to move to a regime where Building Regulations secure not only our health and safety - but our physical and mental wellbeing.

As part of this body of work, [our literature scan](#) provided a summary of how 15 key environmental, physical and spatial aspects of the home interact with our wellbeing, and with each other.

## **Space Standards**

Our findings make the case for adaptable spaces that can meet our needs over time. A **prerequisite for achieving this** would be to bring the **Nationally Described Space Standard (NDSS) into regulation nationally**. Currently the NDSS is a prescribed standard (which can't be changed or amended) when adopted as part of a local plan.

It is worth noting that the minimum gross internal floor areas and storage (m<sup>2</sup>) prescribed by the NDSS may help to reduce the risk that small spaces are not created for functions such as offices, and then used as bedrooms.

Given that open plan is both increasingly fashionable and commercially attractive to housebuilders and renovating householders, space standards may be useful to prevent

inadvertently sacrificing key home qualities (adaptability and space to relax in privacy) where open plan layouts are not well thought through. We need to consider how open plan is translated into NDSS through a review - particularly in the case of extensions and amendments.

## Planning Policy

The importance of views and access to outdoor spaces is well established. We suggest that all planning authorities mandate that **minor new development schemes**:

- **Private outdoor amenity space** - as a minimum average across all forms of development - 5m<sup>2</sup> per unit.
- **Have 'doorstep' play provision**, able to be accessed independently by children.
- Planting one tree per 5 homes with sole ownership of their foundations.

There will be some exceptional circumstances, for example if the site is located in very close proximity to parks or green spaces.

## Consumer Protection

To ensure both our physical and emotional security at home, a number of steps could be taken. For example:

- A review of opportunities for **enhanced security of tenure, including Build to Rent Schemes**, with consideration of financial incentives and support.
- A review of how we could reduce exposure to homeowners taking on a build themselves. Industry could be convened through appropriate forums to discuss how this could be achieved in practice. For example:
  - Facility for contractor and builder funds to be held in Escrow, where appropriate.
  - Provision for Architect/professional sign off on works, contracts, insurance and payment plans (similar to the Approved Inspector process) to reduce risk and exposure on homeowners.

## VAT

This research supports a review to **extend the VAT exemption** from new builds **to all home extensions**. This would help to protect and secure consumers who often pay cash or appoint

subcontractors below the VAT threshold. Appointing subcontractors, and therefore involving multiple parties in the process, brings risk, complexity which can lead.

23% of homeowners say the cost of VAT puts them off a build. See Resi's work with the [Home Owner's Alliance](#) for more details on this.

A **cost benefit analysis** would be needed **to determine what the exemption should be applicable to** e.g. labour, materials, fit out, fixtures, fittings.

## Educating For Happy Homes

Education is key to signal to the built environment sector supply chain and intermediaries, including media and real estate, where policy decisions can influence consumer behaviours and patterns to amplify well-being outcomes.

Our [Industry Perspective](#) shares ideas for how professionals can re-orientate their focus and grow their skills base. These ideas may also be relevant to policy makers:

- We need to integrate a well-being perspective into design education, to develop skills for socially informed design that promotes well-being. This should be a priority for educational and professional institutions, as well as design firms, where much of the applied learning takes place every day.
- The [London School of Architecture's](#) Inter Practice Year and [Birmingham City School of Architecture's](#) Design For Future Living courses are pushing boundaries by looking at alternative ways to combine modern practice with education.
- Start by identifying what skills and capability gaps you have within your organisation in terms of designing for well-being outcomes. RIBA, ARB and other professional bodies can encourage adoption of this through competition briefs.

## Involving Adjacent Policy Areas

We think this debate extends beyond those influencing housing policy. Adjacent areas such as health, education, technology and social value inadvertently drive design and policy decisions that impact on well-being.

More discussion is needed to understand how well-being at home complements and contradicts other strategies and objectives for our housing stock - existing and new supply. For example, how can greater alignment between Department of Health and MHCLG on planning and housing matters be achieved.

The government will also need to work with industry to develop solutions. For example, the Industrial Strategy presents an opportunity to do this through the [Industrial Strategy Ageing Society](#) Grand Challenge to deliver accessible and adaptable homes.

**Finally, achieving happy homes can be supported through policy by:**

- Bolder research to develop insight into how people use space in conjunction with industry and how priorities differ across social groups.
- Increased consumer friendly guidelines and campaigns to educate the nation about happy homes.
- Increased emphasis on measurable wellbeing and sustainability outcomes at the core of all policies.
- Greater inclusion of interior spaces within Design Codes that accompany the [National Design Guide](#), in particular more attention to the adaptability and personalisation of homes.