



Design for Wellbeing A Simple Guide to Wellbeing in Architectural Design

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Wellbeing has become a buzz word in recent years with growing global awareness of mental health and an increased interest from clients. With any movement comes a flurry of associated industry interest and information which can be difficult to navigate.

This booklet aims to demystify design for wellbeing by providing the following:

- An **introduction to design for wellbeing**
- The **business case** for design for wellbeing
- An introduction to **wellbeing design principles** – architectural factors that influence wellbeing
- An overview and comparison of various **certification systems**
- An **overlay** for the RIBA Plan of Work, **Ryder's Plan of Wellbeing**, which outlines what can be done at each work stage to embed wellbeing within the design process

The Plan of Wellbeing is an evolving methodology that can be applied to any project as part of Ryder's standard approach to design.

Further work needed to complete this methodology:

- Guidance on the **briefing process**
- An introduction to methods of **Post Occupancy Evaluation (POE)** and **Building Management Systems (BMS)** relevant to wellbeing

Architecture and Public Health

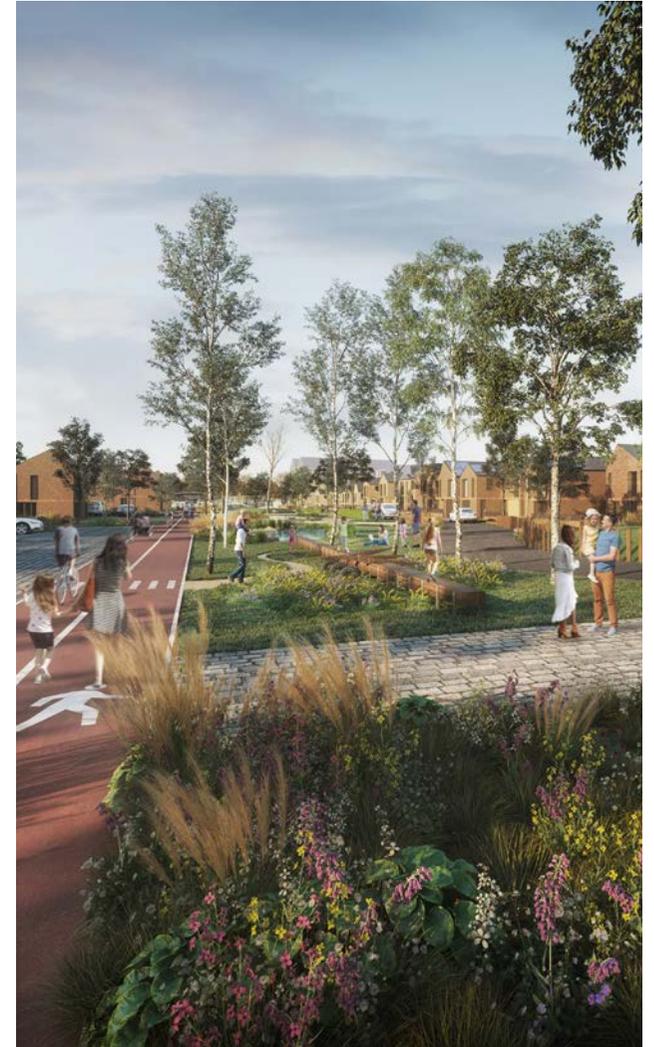
The last two centuries have seen quality of life in the UK transform, with the invention of household appliances, refrigeration and electricity, as well as, the automobile, aeroplanes, radio, television and the internet. We have eradicated killers such as smallpox and polio and have drastically reduced infant mortality rates and cases of tuberculosis

Architecture is the buildings that facilitated these innovations – the laboratories, factories and hospitals – but also, more fundamentally, the towns and cities that cultivated society and allowed it to flourish as it has.

The Great Fire of London is a story that can be used to demonstrate the connection between architecture and public health. The architecture of medieval London consisted of narrow, dusty streets, overcrowded with timber buildings that bred disease and, in 1666, spread a fire that destroyed the city and many of its citizens. The architecture that followed responded and evolved.

It was led by new design principles of wider, cleaner, streets and buildings constructed by brick, with the aim to improve public health by preventing future fires and infections.¹

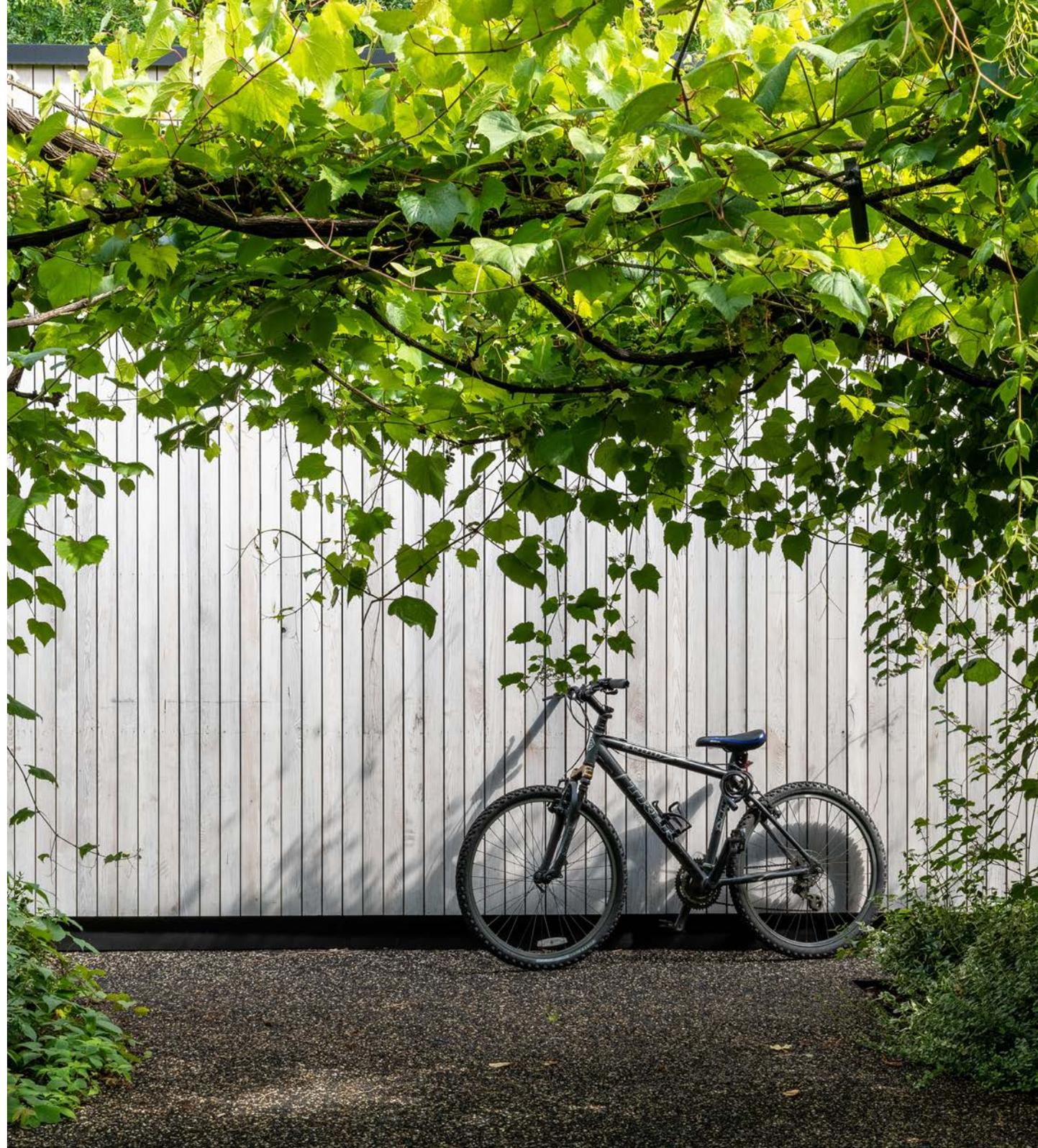
As the setting for our lives, architecture has always been and will always be a key component of public health.



A 2020 study by Hu and Roberts maps the goals of the built environment related to public health over time. Historically, the aim was to prevent infectious disease outbreaks, which were the leading cause of death in the UK until the 1940s.² Now that we have successfully eradicated many of these physical diseases, the focus is shifting to include mental health,³ which is a growing global concern.

According to the World Health Organisation (WHO), depression is now the leading cause of ill health worldwide.⁴

This guide considers the role of the built environment in the global challenge to address today's biggest killer – mental illness.



Architecture and Mental Health

As well as being the leading cause of illness, issues related to mental health are also a leading cause of death. External causes such as drug misuse, self harm and suicide are currently the leading causes of death for males under 45 and females aged 15-30 in the UK.² Mental health issues are endemic in the population and causing significant harm to people's length and quality of life.

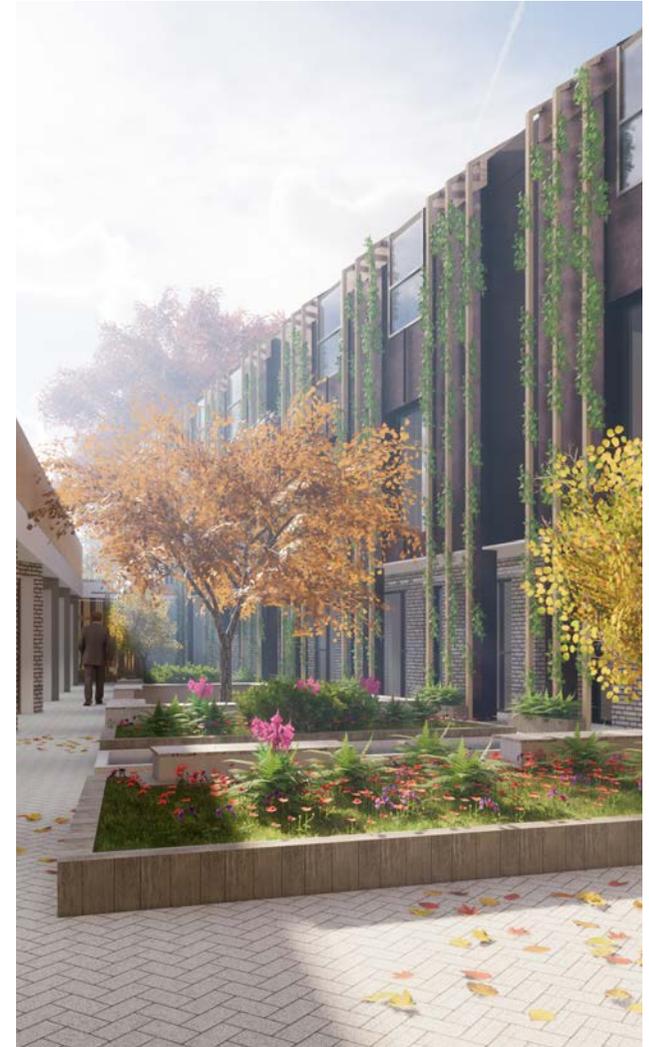
Literature across the social sciences indicates that physical health factors influence mental health and wellbeing. Due to this overlap, the terms health, mental health and wellbeing will be used interchangeably in this paper.

Mental health problems disproportionately affect the urban population. For example, urban dwellers have an almost 40 percent increased risk of developing depression.⁵ Urban areas are shaped heavily by the built environment and therefore mental health should be a key consideration in urban design and architecture.

The widespread problem of poor mental health should be taken as seriously and urgently as other threats to public health, like the deadly diseases of the twentieth century – which required a substantial and innovative response from the construction industry or more recently, the Covid-19 pandemic.

Developing an effective response as architects and designers is crucial, as we have a profound impact on the world through the built environment. Although developments typically aim to improve quality of life, lack of insight and empathy can lead to the opposite.

An example is the popular tower block designs of the 1960s. Newcastle examples include Vale House and Shieldfield House. The high rise blocks were typically part of slum clearance initiatives and supposed to solve society's problems. In reality, people were displaced to new, vertical slums. People no longer knew their neighbours and parents no longer felt safe letting their children out to play because they could not be supervised from high rise apartments.



The tower blocks compromised the lifestyle, safety and wellbeing of many families and broke down communities.⁶ It is important we educate ourselves to avoid failures of empathy and unintended consequences of design like this.

A second example of unintended consequences of design comes from around the 1980s, as environmental sustainability became a growing concern. Many buildings were designed with energy efficiency in mind – airtight buildings with small windows to prevent heat loss. Unfortunately, the human needs of occupants were all but forgotten. This led to a new type of disease called sick building syndrome, where occupants become physically and mentally ill as a direct result of the building in which they work or reside.⁷

Bad architecture is ... as much a failure of psychology as of design.⁶



These examples highlight the need for designers to take a balanced approach to addressing social and environmental problems without compromising wellbeing. To do this, they need to be informed about wellbeing.

Why act now?

The built environment is currently undergoing massive changes in response to the global environmental crisis, with governments around the world committing to ambitious net zero carbon policies.⁸

During this period of change in construction methods and architectural design, there is an opportunity to address the mental health crisis, together with the climate emergency. This could help to improve health and prevent unintended backwards progress, like that experienced with sick building syndrome.





The International WELL Building Institute (IWBI) and the Building Research Establishment (BRE) recognise that planetary health and human health are inextricably connected.⁹

Alongside the changes happening in the construction industry because of net zero carbon policies, evolving technologies have presented opportunities to monitor and control health factors better than ever before.

Monitoring environmental factors has mutual benefits for occupant wellbeing and sustainability. For example, productivity increases of 14 percent have been achieved in workplaces where carbon dioxide levels are monitored and controlled.¹⁰

The recent Covid-19 pandemic has further degraded public mental health. The fear and stress it has created will outlive the virus due to associated unemployment, social isolation and the widespread grief of losing millions of people to the disease.¹¹

Now is an important time to consider mental health in design.

A recent paradigm shift in the social and medical sciences suggests that the solution to depression is less to do with medication and more to do with social prescribing – non pharmaceutical treatments which target the socio-economic-environmental causes of mental illness. Early studies have shown long term benefits.¹² The built environment is an important part of this movement.

Our role as designers, and as people, is to improve people's lives.

Integrating wellbeing with our daily work can help us achieve this, while contributing to our own wellbeing by giving us a greater sense of purpose.

The Business Case for Wellbeing

We can explore the business case for designing for wellbeing with data from case studies where pre and post occupancy data has been published.

Actual figures will vary, depending on the project, but existing data indicates significant financial pay offs for implementing wellbeing principles.

A hypothetical project and client has been created and financial outcomes generated based on data analysis. This exercise aims to monetise the impact of design for wellbeing based on average rates of improvement in measured factors from completed projects. WELL certified projects have been used due to the availability of post occupancy data on them. The intention of this page is to demonstrate the positive impacts of design for wellbeing.

The benefits for implementing wellbeing design principles are highlighted, with the positive impact on absenteeism, productivity and staff retention outlined.



Absenteeism

Average absenteeism in the UK is estimated at four to six days per employee per year. A review of case studies where pre and post occupancy data has been published indicates improvements of 30 percent on average.

Productivity

Research supports claims that potential productivity improvements of up to 14 percent can be associated with a single environmental factor – carbon dioxide. Post occupancy evaluations of two projects estimated productivity improvements as high as 25 to 27 percent.

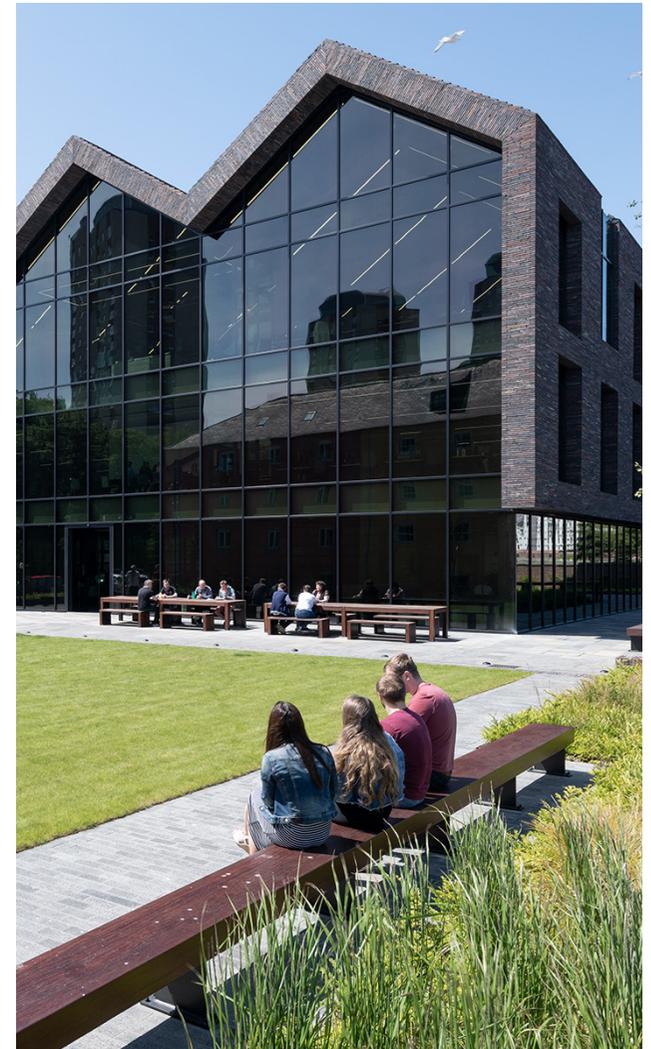
Staff Retention

Oxford Economics estimates that excessive staff turnover can cost £31,000 per employee, including £25,000 for lost output / productivity, as employees take on average 28 weeks to settle into a new role.

Taking these into account, and looking at our example project over leaf, this suggests staff turnover could cost from £155,000 to £465,000 a year.

In one set of data on staff retention, a possible improvement of 27 percent was cited following occupation of a WELL certified workplace.

The information on this page is sourced from a study by Building Magazine.¹⁰



Example Project

100 employees

Absenteeism

- 30%

£150,000 / year fee earning output per
employee

Productivity

+ 14 - 27%

£15,000,000 annual revenue

1,000m² or 10,260ft² net office space
BCO recommends 10m² per employee

Staff retention

+ 27%

£100 / ft² baseline Category B fit out

£1,076,390 construction value of fit out
Excluding added costs for WELL
Certification

Wellbeing
Sense of community
Enjoyment in
environment



Costs
Based on WELL Certification

Enrolment
£2,200
flat fee

Build costs uplift
£59,201
+5.5% of construction value

Programme fee
£1,500
£1.50 per m² or 14p per ft²

Design fee
£1,149
+0.1% (set by designer) of construction value

On site performance testing
£6,500+
approximately

Total cost added
£70,550

Value Added
Based on example project

Absenteeism
£100,000 / year
30% decrease

Productivity
£2,100,000 / year
14% increase

Staff retention
£82,500 / year
27% improvement

Total value added
£2,282,500 / year

Benefits minus costs
+ £2,211,950
After one year in use

Wellbeing Design Principles

The wellbeing design principles are derived from the common themes mapped across a variety of sources including the WELL Building Institute, Fitwel and the RIBA's recently published guide to architecture and mental wellbeing, Happy by Design.¹³ A project brief or architectural design can be assessed against these principles at any point.



Environmental Design Principles



Air

Air quality is a common theme across all rating systems and is an important factor contributing to the health and wellbeing of building occupants. Good air quality can **improve alertness, mood, productivity, respiratory health and prevent the spread of disease**.¹⁴

Productivity improvements of up to 14 percent can be associated with the control of carbon dioxide alone.¹⁰

Key design considerations

Sensors and systems to monitor and control air quality, natural and mechanical ventilation, selection of interior materials that do not off gas harmful chemicals such as VOCs (volatile organic compounds), planting, entryway systems to reduce the amount of dirt and particles that enter the building, and a smoke free policy.



Comfort

It is **important for people to feel comfortable with their environment** and to have some control over it. This allows basic needs, which underpin wellbeing, to be met.¹⁵

Comfort includes visual, thermal, acoustic and ergonomic comfort.

Key design considerations

Comfortable seating, simple temperature controls, efficient building fabric, good ventilation, acoustically absorbent materials, operable windows, spaces that range in size and level of privacy – spaces for private conversation are especially important for open plan offices and not to be overlooked.

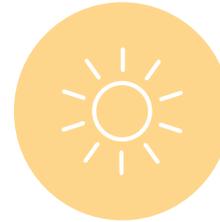


Fitness

Fitness is a prerequisite for good health and wellbeing. It is shown to boost mood and prevent many mental and physical illnesses.¹⁶

Key design considerations

Choosing a site in walking distance from amenities, providing bicycle storage and active furniture (sit stand desks).



Light

Access to natural light and the right types of artificial light can regulate our hormones which impacts every part of our mental and physical health¹⁷, including mood and sleep quality.¹⁸

Key design considerations

Use of glazing and orientation to maximise daylight, design and wavelength of artificial lighting, internal finishes, operable shading and glare control.



Nature

Biophilia theory refers to **our innate attraction to nature as humans**. The theory states that our brains have developed in and around nature and suggests that our disconnection from it in the modern world, where we spend 90 percent of our time indoors¹⁹, causes mental and physical stress.²⁰

Wellbeing certification systems, such as Fitwel and WELL, refer to studies that show integrating nature into our environments, both indoors and outdoors, is beneficial to our health and wellbeing.

Key design considerations

Indoor and outdoor planting, gardens, use of natural materials and improvements to local biodiversity.



Views

A study conducted by Roger Ulrich in 1984 showed that surgical patients assigned to rooms with windows looking out on a natural scene had shorter postoperative hospital stays and required less pharmaceutical pain relief than patients in similar rooms, with windows facing a brick wall.²¹

Benefits to having views of nature are supported by a growing body of research.

The views theme considers internal finishes and textures as well as views outside of a window. This is because **some materials and textures are shown to be cognitively stimulating or restorative**, while others drain our cognitive resources.²²

Key design considerations

Glazing and views out, use of natural materials, balance of textures and level of detail to surfaces, active frontages at street level and views in for non private indoor spaces.



Beauty

The value of beauty in architecture is difficult to measure yet innately apparent. The rise of functionalism in the twentieth century questioned the need for aesthetic beauty in architecture and led to masses of dreary and inhumane buildings.

Long term economics also supports the case for beautiful architecture, with countless monolithic flat blocks left dormant or demolished within half a century of construction, while architecture built before 1900, when beauty was considered essential, becomes hugely oversubscribed.

If only utility is considered, the things we build soon become useless because nobody wants to be in them.

'In a degraded environment, however safe and rich our material lives, our spirits will sink.'²³

Key design considerations

Beauty is difficult to distil into design principles and will depend on the project and its location. Recommendations include considering all schemes at the human scale, avoiding long blank façades at street level, integrating natural, local materials and nature and ground floor animation, such as full height glazing for public amenities or colonnades.

Social Design Principles



Social Interaction

As social creatures, it is important that people have **regular human interaction**. This can be great for emotional support, innovation and collaboration. All of these contribute to wellbeing.

Key design considerations

A mixture of public, semi public and private spaces, shared outdoor space and high density horizontal street layouts (to increase chance encounters).



Safety

Feeling safe is a basic human need and prerequisite for wellbeing.²²

Key design considerations

Site location, mixed use developments (which ensure occupation and natural surveillance at all times of the day), lighting levels, emergency preparedness and certified first responders.



Community

Considering the impact on the building occupants and the surrounding community, the design can **positively impact a wider variety of people**. Community includes people who work and reside nearby and people who pass the building on a daily commute.

Key design considerations

Community engagement during the briefing and design stages, considering how routes through the site will be affected by the proposed building, providing public amenities, such as outdoor seating to make the area more accessible for the elderly, environmental sustainability measures and making facilities in the building open to the public, for example the café.



Equity

One in four people in the UK have a disability – eight percent of children, 19 percent of working age adults and 44 percent of pension age adults.²⁴

Equity and accessibility should be considered essential to design so that a building can accommodate multiple generations and people with compromised physical and mental abilities. A building designed without consideration can lead to injury, humiliation and distress for those affected.

Motionspot is an accessible design specialist focused on creating design solutions that are also beautiful. People should not be constantly reminded of their disability by often unsightly yet vital equipment.

Key design considerations

Universal design, lactation rooms for mothers in public buildings and prayer spaces.

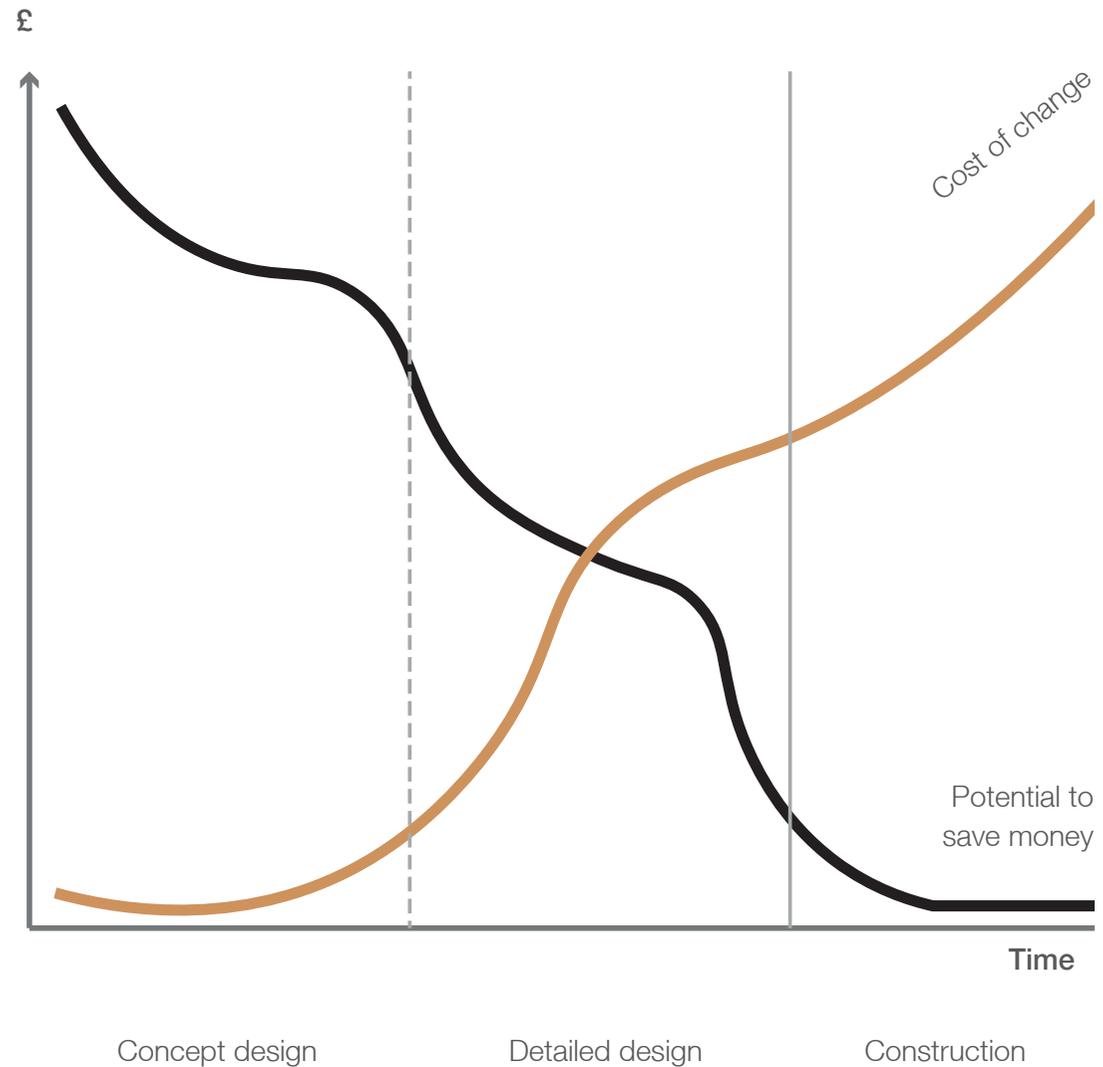
The Importance of Briefing

It is important to consider wellbeing as early as possible in the design process – RIBA stages 0 and 1. The increasing cost of change over a project timeline means that cost will limit wellbeing objectives if they are not established early on.

“It’s something that should be raised at the very beginning.”²⁵

The same goes for wellbeing certification, this should also be raised as a briefing items to establish early on whether clients are interested. WELL or Fitwel cannot be added in at the later stages without extensive redesign work.

“We tend to get ... asked ... around like stage three or four, oh, could we go for WELL Standard. It’s like, “Not really. Not at this point.” We need to push that earlier.”²⁵



The Importance of POE

The Design Council, an independent charity which acts as the government's advisor on design, collaborated with Social Change UK to survey over 600 built environment practitioners across the UK to understand the barriers to creating healthier places. The study cited difficulty demonstrating impact as a key barrier and recommended Post Occupancy Evaluations (POE) of case studies as a solution.²⁶

This reflects an industry wide problem with performance gap (buildings not performing as designed) caused by a lack of POE. This problem is most reported around sustainability objectives but is equally important for wellbeing. Multiple studies suggest that in use energy consumption is often five to ten times higher than compliance calculations carried out during the design stage. Studies include the Zero Carbon Hub report, 'Closing the gap between design and as-built performance', and Innovate UK's 'Building Performance Evaluation Programme'.

They highlight a lack of monitoring and feedback following occupancy, meaning that problems are not identified and corrected and lessons are not learnt to inform future developments.

The RIBA's 2020 Plan of Work looks to address this by including light touch POE. However, this is not yet part of widespread practice, partly due to both practices and clients not wanting to foot the bill.

The failure of the construction industry to measure and evaluate projects creates a series of problems that inhibits design for wellbeing, including:

- Difficulty evidencing impact to motivate clients
- Performance gap between design intent and actual performance
- An inability to learn from past designs, which hinders progress in practice and supporting theory

Design for wellbeing cannot be delivered successfully and consistently without POE because there is no way of knowing whether wellbeing objectives are upheld and achieved.

Two possible solutions are:

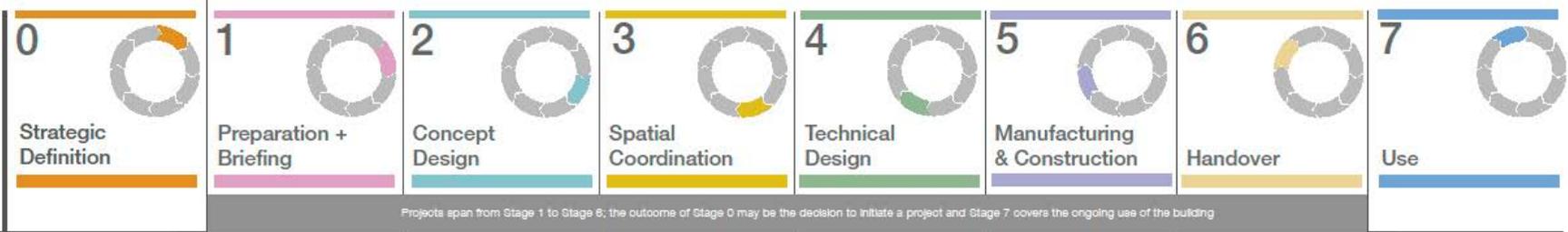
- 1 Designers conduct their own POE on all projects to monitor and validate wellbeing objectives
- 2 Enrol projects with a certifier, such as WELL or Fitwel, who will take on the responsibility for monitoring and validation throughout design, construction and use

A cultural shift is needed from the construction that values the benefits of POE over the short term costs.

The following page contains an overlay for the RIBA Plan of Work – The Plan of Wellbeing. It breaks down tasks associated with design for wellbeing and applies them to each work stage. It can be used as a tool throughout the design processes to track a project's objectives around wellbeing.



Plan of Wellbeing



Overview	0 Strategic Definition	1 Preparation + Briefing	2 Concept Design	3 Spatial Coordination	4 Technical Design	5 Manufacturing & Construction	6 Handover	7 Use
<p>Core Tasks during the stage</p> <ul style="list-style-type: none"> <input type="checkbox"/> Discuss your standard approach to design for wellbeing with the client, including the benefits to them When achieving, monitoring and verifying the project's objectives. Explain the role of: <ul style="list-style-type: none"> <input type="checkbox"/> Post Occupancy Evaluation (POE) <input type="checkbox"/> Building Management Systems (BMS) <input type="checkbox"/> Include POE and BMS within the proposed scope of works <input type="checkbox"/> Review the project to assess whether the client could benefit from adopting a wellbeing Certification System (see pages 18 - 31) <input type="checkbox"/> If yes, introduce them to the Certification System, including the general and financial pros and cons (see page 18 - 19) If the client decides to commit to certification, this should be: <ul style="list-style-type: none"> <input type="checkbox"/> Added to the brief and allowances made in the Cost Plan for all associated expenditure (see page 19) <input type="checkbox"/> Enrolled with the certifier <input type="checkbox"/> Consider Wellbeing Design Principles when conducting site appraisals, eg light and orientation (see pages 5 - 10) 	<p>Identify wellbeing as a priority</p> <p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> Undertake a thorough briefing process (see page 13), involving end users of the building <input type="checkbox"/> Include the project's Wellbeing Objectives in the project brief <input type="checkbox"/> Assess how other outcomes, eg, spatial requirements or sustainability goals, could complement or conflict. Could other parts of the brief be better integrated with the Wellbeing Objectives? <input type="checkbox"/> Use the Wellbeing Design Principles in any feasibility studies undertaken <input type="checkbox"/> Project budget, project programme and project execution plan to allow for Wellbeing Objectives <input type="checkbox"/> Liaise with cost consultant to ensure Wellbeing Objectives have been allowed for in cost plan, including sums for POE, BMS and, if relevant, Certification <input type="checkbox"/> Refine the project's Wellbeing Objectives, outline them in stage reports, raise them for discussion in meetings and ensure the client team and design team are aware of them <p><small>If the architect is not appointed in Stage 0, Core Tasks from Stage 0 should be completed at Stage 1.</small></p>	<p>Create a design that achieves the Wellbeing Objectives</p> <p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> Prepare an Architectural Concept that achieves the Wellbeing Objectives <input type="checkbox"/> Agree any changes to Wellbeing Objectives set in the project brief <input type="checkbox"/> The stage design programme should ensure that wellbeing remains a priority for the design team <p>Ensure wellbeing is on the agenda for:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Design reviews <input type="checkbox"/> Client engagements <input type="checkbox"/> Design team meetings <p>Relevant wellbeing experts / consultants are appointed</p> <p><small>If the architect is not appointed in Stage 0 or 1, Core Tasks from Stage 0 and 1 should be completed at Stage 2.</small></p>	<p>Maintain focus on wellbeing</p> <p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> The stage design programme should ensure that wellbeing remains a priority for the design team <p>Ensure wellbeing is on the agenda for:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Design reviews <input type="checkbox"/> Client engagements <input type="checkbox"/> Design team meetings <input type="checkbox"/> Audit the design to check it still achieves the Wellbeing Objectives following spatial coordination <input type="checkbox"/> Amend design before Stage 3 submission if needed <input type="checkbox"/> Track Wellbeing Objectives throughout value engineering to ensure they can still be achieved	<p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> The stage design programme should ensure that wellbeing remains a priority for the design team <p>Ensure wellbeing is on the agenda for:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Design reviews <input type="checkbox"/> Design team meetings <input type="checkbox"/> Coordinate BMS <input type="checkbox"/> Implement change control procedures to deal with any changes that impact Wellbeing Objectives	<p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure the contractor is aware of the project's Wellbeing Objectives by discussing it in any pre start meetings 	<p>Monitor and verify wellbeing outcomes</p> <p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> Begin taking measurements for POE to monitor Wellbeing Objectives, eg using Building Management Systems 	<p><input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <input type="checkbox"/> Verify Wellbeing Objectives and continue to monitor them <input type="checkbox"/> Continue to collect data through Building Management Systems <input type="checkbox"/> Carry out POE (see page 14). It is recommended to use a mixture of qualitative and quantitative methods to assess a variety of Wellbeing Design Principles. For example, by analysing data from BMS and occupant surveys using Anup's BUS methodology <input type="checkbox"/> Use the results to demonstrate impact to the client and to inform and improve future design 	

Wellbeing Certification

Certification systems offer design guidance, monitoring and validation of wellbeing principles. Certification systems reduce the gap between a project's wellbeing goals and its actual impact on occupant wellbeing.

The value of wellbeing certification systems

1 Improved user wellbeing

Post occupancy evaluation of certified projects provides strong evidence.

2 Social value

Evidencing social value in every project is becoming increasingly important since the introduction of the Social Value Act, 2013. Certification evidences a project's social impact.

3 Guidance on building design and management

The evidence based guidance is reliable, effective and helpful to the designers and managers.

4 Monitoring of wellbeing principles throughout design, construction and use

Ensures minimal deviation from wellbeing goals as project develops. For example, value engineering exercises deviating project goals. Input from wellbeing consultants employed by the certifier can fulfil this role.

5 Validation of wellbeing goals

Typically, validation takes the form of a three tier rating system and is used to attract employees and tenants. Projects need to be recertified, every few years, to maintain formal certification.

6 Financial benefits

Increased rental rates and productivity. Business Case shows an evidence based cost analysis.

The drawbacks of wellbeing certification systems

1 Upfront and re certification costs

The diagram opposite breaks down the costs associated with certification. See Business Case for an evidence based cost analysis. The ongoing costs of re certification should also be considered if the client wants to maintain the certified status.

2 Time commitments

Certification systems provide thorough and detailed criteria, and time is required to fulfil this criteria. Some criteria relies on building management and operations. Clients must be aware of the commitment required from them, as well as the design team, before enrolling for certification.

Cost Breakdown

Based on WELL Certification

Enrolment
£2,200
flat fee

Build costs uplift
+ 5.5%
of construction value

Programme fee
£1.50 / m²
12p per ft²

Design fee
+ 0.1%
of construction value

On site performance testing
£6,500 +
approximately

Benefits

Based on certified WELL buildings

Absenteeism
- 30%



Wellbeing
Sense of community
Enjoyment in environment

Productivity
+ 14 - 27%

See The Business Case for Wellbeing pages (8-11) on cost vs benefit analysis

Staff retention
+ 27%

The Wellbeing Certification Systems



Focus
Wellbeing

Launched
2016

**Number of certified buildings
(approximately)**
400

Place of origin
USA

Parent organisations
US Centers for Disease Control
and Prevention
US General Services
Administration
Center for Active Design

Fees

Enrolment: £1,830
Programme: £1.29/m²

Methods of assessment
Scorecards
Environmental calculations

Results
Numerical score
Three tier rating system
(one to three stars)



Focus
Wellbeing

Launched
2014

**Number of certified buildings
(approximately)**
300

Place of origin
USA

Parent organisations
Delos Living LLC
International WELL
Building Institute

Fees

Enrolment: £360
Programme: 90p/m²
(Programme fee varies based
on size)

Methods of assessment
Scorecards
Environmental calculations
On site testing

Results
Numerical score
Three tier rating system
(silver, gold and platinum)



Focus

Environmental
Social
Economic sustainability

Launched

1990

**Number of certified buildings
(approximately)**

570,000

Place of origin

UK

Parent organisations

Building Research
Establishments (BRE)

Fees

Enrolment: £265
Programme: £2,865
(Programme fee varies based
on size)

Methods of assessment

Scorecards
Environmental calculations
On site testing

Results

Numerical score
Five tier rating system
(pass to outstanding)



Focus

Environmental
Social
Economic sustainability

Launched

1998

**Number of certified buildings
(approximately)**

33,000

Place of origin

USA

Parent organisations

US Green Building Council
(USGBC)

Fees

Enrolment: £1,080
Programme: £3,600
Certification: £18,200

Methods of assessment

Scorecards
Environmental calculations
On site testing

Results

Numerical score
Four tier rating system
(certified to platinum)

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