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# Designing Restorative Spaces



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# Foreword

“

Much has already been said about the post-pandemic return to work – how soon, how often, and how to encourage it. But there seems to be a gap in recognising the emotional impact of returning to work after the unprecedented changes we have all experienced.

We know from our research that emotional resilience is low post-pandemic. Yet when we ask organisations who are trying to draw employees back into the office the dramatic question “where do people in your workplace go when they need time alone?” sadly, the answer is all too often “the bathroom”. We think the workplace can do better than this.

This guide demonstrates how restorative spaces can be easily incorporated in workplace design to support and nurture people physically, mentally, and emotionally.

**Oliver Heath**

Author, Biophilic Design Expert, and Director of Oliver Heath Design





# Why are we interested in restorative spaces?



The pandemic has transformed the spaces where we work. With the corporate landscape that many of us usually inhabit being swapped for the comfort of our own homes; conducting work from dining room tables and make-shift workspaces. We now find ourselves re-inhabiting offices, but are they equipped to support the wellbeing of a workforce which has navigated such extreme change, and now turn up to work with differing physical and emotional needs as a result?

This guide focuses on spaces designated for individual restoration to **help align workplace design with the changing needs and attitudes of the workforce**. We will look at why we need them, the benefits of incorporating them, how Biophilic Design features can help, and the key elements required for creating restorative spaces at a range of scales, before looking at some inspiring examples.

It is important to note that restorative spaces work hand-in-hand with spaces designed for social connections when creating more positive workplaces. While we may have greater privacy when we work from home, opportunities for face-to-face communication are missing, generating significant barriers when it comes to collaboration and innovation.

To facilitate both, organisations now need to provide both **opportunities for connecting with others and for private retreat** within the workplace. We have explored how to design workplaces that encourage interactions in 'Creating Positive Spaces by Designing for Community'. So now, let's focus in on designing individual spaces for restoration...

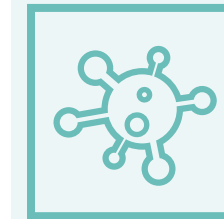
“

The word homely is coming up more and more often, even right up into big corporates and people who are quite traditional...the barriers are being broken down. The edges are smoother, and the workspace is definitely becoming a more comfortable place.”

Tracey Sanders, Workplace Director, tp bennett



In July 2020, **48%** of European workers were partly conducting their work remotely with **34%** working exclusively from home.<sup>i</sup>



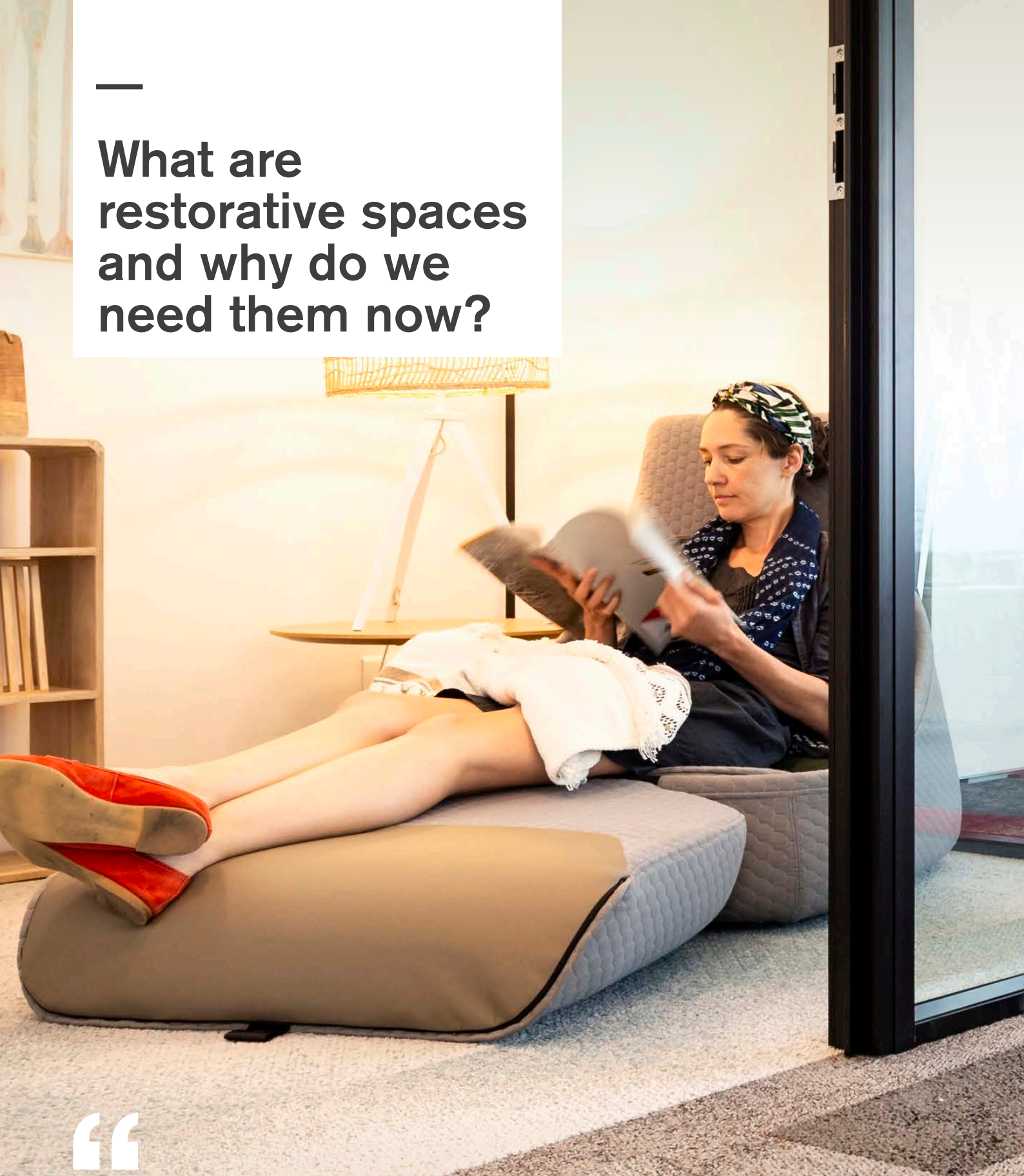
Research conducted by Kingston University, London, found that **1 in 4 people** scored highly on the Covid Anxiety Scale.<sup>ii</sup>



Between 2020 and 2021, **50%** of all work-related ill health cases in the UK were caused by stress, depression, or anxiety.<sup>iii</sup>



# What are restorative spaces and why do we need them now?



Workplace design has advanced to include the colours, textures, and tones that would typically be used in home interiors. We are seeing an increase in the use of neutrals and greys to provide a sense of calm complimented by earthy greens and blues to ground the space for employees.”

Mandy Leeming, Design Director, Interface, EAAA

Restorative spaces are designated areas within the office that allow workers to take the time they need to ensure they are safeguarding their wellbeing. They can be created through scalable design features, from high-backed chairs with views out of windows, to separate rooms designed to support the senses.

Having these spaces within the workplace can help:

- cultivate the sense of privacy and comfort employees get from their home environment within the collaborative setting of the office
- better support occupants by deconstructing the taboo of wellness caretaking and making it a priority rather than an afterthought

As workplaces are gradually becoming re-populated, many of us have returned to the office (whether that's on a full time, or hybrid basis) with new sets of needs regarding our wellbeing at work. These needs may not have existed, or perhaps weren't as apparent to us prior to the COVID-19 pandemic. With this in mind, re-thinking how workspaces support occupants is essential – especially if businesses want to encourage employees to keep returning to the office now that it is viable to work from home.

Whilst working from home (WFH) many of us had greater control over our working environment. Adapting our home working spaces to our personal preferences, and in turn optimising comfort and privacy. Working from home has allowed people a sense of comfort that was not afforded to them previously; reflected by the fact that 83% of global workplace leaders surveyed in 2021 agreed that hybrid work will remain in place post-pandemic.<sup>iv</sup>



In 2021, **83%** of global workplace leaders surveyed agreed that hybrid work will remain in place post-pandemic.

While WFH has indeed provided the comfort that shared offices were lacking, it has also negatively impacted on how employees feel about returning to the workplace. Research conducted at the beginning of 2021 found that 100% of 4,553 respondents from across the globe, had some anxiety about re-entering the office. With 71% citing less flexibility as a contributing factor.<sup>vi</sup>



Across the globe **100%** of 4,553 respondents surveyed had anxiety about re-entering the office.

It would be naïve to think that the issues that have arisen from employees departing the office, are going to disappear upon re-entering them. Now, more than ever, shared workspaces need to be equipped with design features to help support wellbeing, and in turn reap the many benefits for both employee and employer that come from creating a restorative work environment.



If the office doesn't provide anything other - or more importantly, anything better - than working from home, then why would people make the journey?"

Rosie Haslem, Managing Director, Streetsense



Globally **67%** of employees want more in-person work or collaboration post-pandemic.<sup>v</sup>



# The benefits of restorative spaces



A global report conducted by Limeade in 2021, found that 70% of Australian respondents said that a positive employee experience was directly connected to feeling their organisations cared about their wellbeing. However, only 37% of French respondents felt that their wellbeing was supported by their organisation.<sup>i</sup>

Providing restorative spaces can support the health and wellbeing of employees within the office environment – helping them to acclimatise back into the physical workplace and motivating them to keep returning to it. However, the benefits do not end here as incorporating restorative spaces also presents an attractive business case to the organisations that invest in them.

Let's take a look at some of the benefits to both employee and organisation...

## The top three benefits for employees:



### Mental Health

A study conducted by Microsoft Human Factors Lab using an electroencephalogram (EEG) – a tool which monitors electrical activity in the brain – showed that those who conducted **back-to-back meetings had a spike in beta wave activity, which causes stress.** Compared to those who took at least a ten-minute break between meetings who experienced a dip in beta activity.<sup>vi</sup> Creating designated spaces to go for short breaks can therefore help reduce stress.



### Physical Health

If employees are experiencing physical discomfort they may require somewhere to rest or stretch, or for those breastfeeding to express milk in private. Global research aimed at understanding the impact of persistent COVID-19 symptoms, known as Long COVID, found that **91% of respondent's recovery time surpassed 35 weeks.**<sup>viii</sup> With many employees returning to work post-isolation period, restorative spaces can also offer a place for those suffering lingering covid symptoms to seek respite.



### Emotional Wellbeing

A 2021 study conducted in the US showed that **remote working has led to 34% less peer recognition for new employees**<sup>xi</sup>, encouraging workers back into the office by proxy facilitate more face-to-face interactions. These exchanges are essential for enhancing connections with colleagues by building trust, sharing knowledge, and improving communication.<sup>x</sup>



Organisations today are seeking more than token gestures when it comes to wellness in the workplace. The office is increasingly viewed as the primary place to cultivate team culture as well as a place to re-charge with emotional and social nourishment. Walking the talk with organisational culture and values are key here.”



The top three benefits for organisations:



**Attracting new talent**

Restorative spaces are symbolic, they indicate that the workplace is somewhere wellbeing is supported. A recent study spanning 31 countries found that **workers are now 53% more likely to prioritise their health and wellbeing over their job.**<sup>xi</sup> Attracting new talent will require employers to demonstrate that employees' wellbeing is fundamental to their organisation.



**Staff retention**

The 'great resignation' saw 17% of employees across North America, Latin America, Asia-Pacific, Europe, Australia, and New Zealand leave their jobs in 2020, with **24% of people citing personal wellbeing and health as the reason for resigning.**<sup>xii</sup> Restorative spaces are an effective way of aligning offices with workers prioritising wellbeing, leading to better employee retention. Additionally, research by Deloitte found that **the cost to employers of poor mental health in the UK was £56bn in the year 2020-2021**, an increase from £45bn in 2019<sup>xiii</sup> - equivalent to €65.7bn and €52.8bn, respectively.



**Staff motivation**

New employees taken on during the period of remote working haven't had the chance to experience the culture of the office. In the US research found that this resulted in **employees being 20% less likely to take on the values of the organisation they represent.**<sup>xiv</sup> By creating a positive and restorative work environment, those new to the organisation are more likely to feel like part of the workplace community, and in turn share common goals and a sense of purpose in their work.<sup>xv</sup>



We're seeing increasing numbers of people using the office and what it provides as something to either retain staff or to attract new staff, before the pandemic it was more of an employer's market and now it's becoming a lot more of an employee's market."

Lucy Bagshaw, Associate Director & Sustainable Designer, tp bennett





# How Biophilic Design can help

Restorative spaces are designed with the intention of supporting employee wellbeing and encouraging positive attitudes towards the workplace. Studies have shown that an increase in visible Biophilic Design elements directly correlates to an increase in satisfaction with the workspace and working life.<sup>xvi</sup>

Biophilic Design offers an approach to creating Positive Spaces that brings nature and natural elements into the built environment and considers all the senses to enhance wellbeing.

Biophilic Design can help address some of the common mistakes that we see within the design of restorative spaces, such as:



**Over-stimulation**  
stark lighting, too many textures, colours, patterns, and too much noise



**Under-stimulation**  
no views/natural light, an under-considered space which is overly minimal or stark in style



**Claustrophobic spaces**  
lacking in space, ventilation, or outward vistas (e.g. the converted broom cupboard)



**Inaccessibility**  
poor wayfinding or too far from workspaces



An abundance of plants, natural light and ventilation, Biophilic Design, healthy food choices, ergonomics, spaces for quality social connection and technology to support equitable engagement are increasingly powerful tools for talent attraction, and today are at the core of a human centric workplace.”

*Davenport Campbell*, workplace design experts'



**Biophilic Design principles to enhance restorative spaces:**

 Click the icon to read more about Biophilic Design in our guide to 'Creating Positive Space by using Biophilic Design'



**Direct experiences of nature**

**Light** – adjustable diffused and variable light, whether it is natural or simulated, can help subtly stimulate the visual senses

**Fresh air** – essential for supporting wellbeing, naturally or mechanically ventilated spaces feel fresh, healthy, and revitalising

**Plants** – according to Attention Restoration Theory,<sup>xviii</sup> viewing living elements can help replenish our mental and attentional capacity after too much “directed attention”<sup>xix</sup> – ideal for a restorative space.

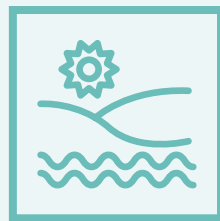
**Non-Rhythmic Sensory Stimuli (NRSS)<sup>xx</sup>** – calming non-threatening motions found in nature (e.g., grass swaying, ripples on water, or leaves in a breeze) help us enjoy “effortless attention” for a short while. NRSS can be brought in through water features, or strategic placement of plants, or soft materials where there is gentle air flow.



**Indirect experiences of nature**

**Images of nature, natural colours, shapes, forms, and geometries** – together these can create subtle stimulation for the senses and prevent wellness spaces from feeling clinical, or like an afterthought.

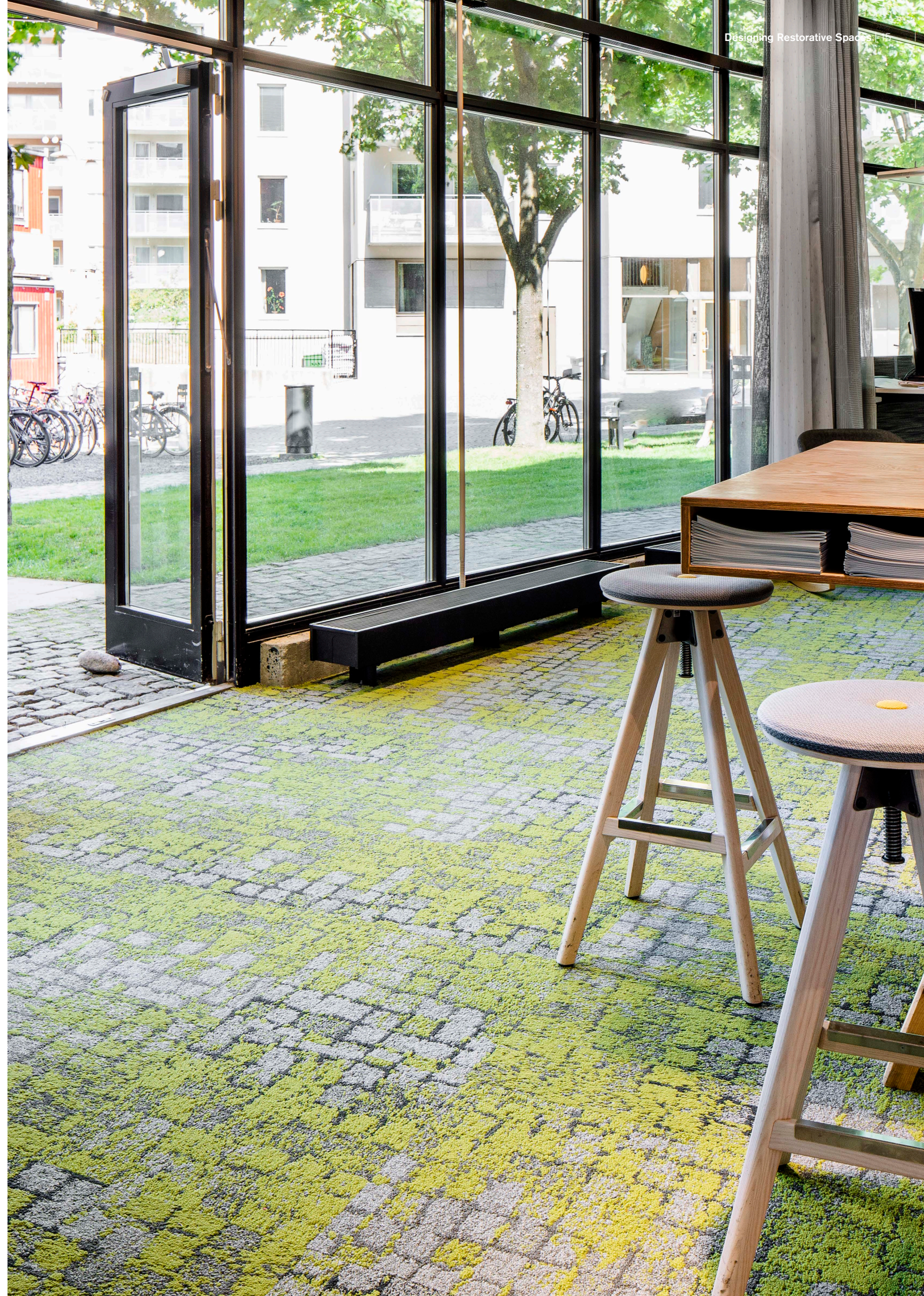
**Natural materials** – such as wood used for wall and floor treatments and furniture can offer visual and tactile stimuli. Exposure to wood can also increase the ability to focus, while also improving mood and productivity.<sup>xxi</sup>



**Experiences of space and place**

**Prospect & Refuge** – a spatial strategy employed to support our innate desire for views across our landscape, from a place of refuge.<sup>xxii</sup> This combination of privacy with exterior visibility can be implemented into the design of restorative spaces to prevent claustrophobia and offer visual stimulation.

**Mobility & Wayfinding** – using techniques which support navigation of spaces increases comfort and reduces anxiety.<sup>xxiii</sup> Zoning using nature inspired materials, colours, and textures used in flooring and wall treatments can help create clearer routes to restorative spaces making them more accessible.





# A framework for creating restorative spaces

In the workplace there are often practical limitations when it comes to implementing restorative spaces; especially in smaller offices where space is limited. From combating privacy issues in an open plan setting, to navigating larger locations where workers may be required to travel further from their desks to recuperate. There are a range of techniques and methods that can be employed to successfully design a restorative space at any scale.

## Key features of a restorative space:

### Sense of Privacy

Feeling like you aren't going to be disturbed is essential for supporting the levels of privacy that may be needed for a quiet moment alone or private emotional releases which employees don't want to share with colleagues.

### This can be achieved through:

- Clear boundaries and lockable spaces, which allow workers a sense of secure privacy
- Zoning the area using flooring and wall treatments
- Signalling devices which indicate to others, from a distance, that spaces are occupied
- Having low levels of acoustic reverberation and sound masking using nature sounds e.g. birdsong
- Furniture or partitioning which shields users from behind, creating security while still allowing a sense of prospect looking forward



...wellness spaces are now being included in most new workplaces. These take the form of multi-function wellbeing rooms – a lockable private room with a comfortable sofa or high-backed armchair. Even in the smaller offices we recommend there is some type of decompression space, even if it's just a couple of high-backed armchairs in a quiet corner, facing towards a window with a view.”

Deborah Wilder, Work Psychologist & Workplace Strategist, Workwell PCS



### Visual stimulation

Our visual sense is the most dominant and so careful consideration is needed to get the stimulation level just right so that it doesn't overwhelm.

#### This can be achieved through:

- Natural light – or adjustable artificial and circadian lighting
- Images or real forms of nature (such as plants)
- A calming colour palette – using muted natural tones
- Orientating seats to offer views of the outside
- NRSS – incorporate views of gentle movement through plants or materials in soft breezes, water, dappled light, and kinetic sculptures. Where this isn't possible provide moving imagery by way of screen or projection

### Adaptability

The baseline of sensory stimuli should be very low e.g. any colours, patterns, textures, scenting, and acoustics should be suitable for the most sensitive of users. Additional sensory elements should be controllable by the user, allowing a personalised experience.

#### This can be achieved through:

- Dimmable or adjustable lights
- Operable blinds (and windows if possible)
- Video screens and audio that can be controlled
- Atomisers with natural scenting that can be turned on/off
- Seating that can be moved into a comfortable position

### Support mind-body connection

Creating options to lay down or move enables employees to occupy and use the space to suit their individual preferences i.e. using the floor space to stretch. Even better if the materials used within the space subtly stimulate the sense of touch, eliciting physical interactions.

#### Where possible incorporate:

- Soft textures in the form of rugs, cushions, and blankets – opt for natural materials and patterns where possible
- Fully reclining seating or armchairs with footstools or loungers – these offer an opportunity to incorporate natural forms
- Floor/yoga mats & blocks

**Now we've covered the essentials, let's look at how they might be put into practice at different scales...**



**Restoration doesn't necessarily involve complete stillness...**

**Dr James Levine**, Professor of Medicine at the Mayo Clinic, found that inactivity during the workday can cause our brain activity to enter a slumber, impairing our cognitive abilities. The simple action of standing up is enough to break out of this sedentary state. By consciously moving throughout the day, we can help combat the adverse health effects that can result from sitting for long periods of time.<sup>xxiv</sup> What's more it can help reduce anxiety by shifting our nervous systems out of fight or flight mode.<sup>xxv</sup>



# Restorative spaces at a range of scales



As previously mentioned, restorative spaces can be implemented into the office environment at a range of scales to suit the existing layout and culture.

Below is an example of the range of scales at which restorative spaces could be provided:

Higher level of provision



Multiple occupancy wellbeing rooms with furnishings, finishes, and adaptable technology which supports individual experiences and provide privacy within the shared space.



Individual occupancy wellbeing rooms with closing doors, furnishings, finishes, and adaptable technology which aid in sensory restoration.



Partitioned or enclosed pods that offer acoustic privacy and refuge within or on the periphery of a more open-plan office space



High-backed chairs zoned away from busy areas with vistas looking out of the workplace

Lower level of provision



We've gathered three exemplar restorative spaces at a small, medium, and large scale that demonstrate how key features can be combined to design a restorative space irrespective of size.



**Small scale:** An example of how small-scale restorative spaces can be created through well-positioned high-backed seating.



**Medium scale:** A great mid-level example of how to spatially and sensorily design and implement restorative areas into the office.

Positioning takes advantage of natural light and views out of the space.

Soft tactile furnishings and cushions in natural colours create a 'homely' feel.

Side tables which allow users to place belongings, or a glass of water if they are taking a moment to rehydrate.

Plants provide both a direct connection to nature and visual restoration.

Slat walls/partitions allow those outside to see whether the space is occupied without compromising the users privacy or sense of refuge.

Scenting can aid in restoration. Be careful to only use natural scents and not to overwhelm the space as many are sensitive to smell.

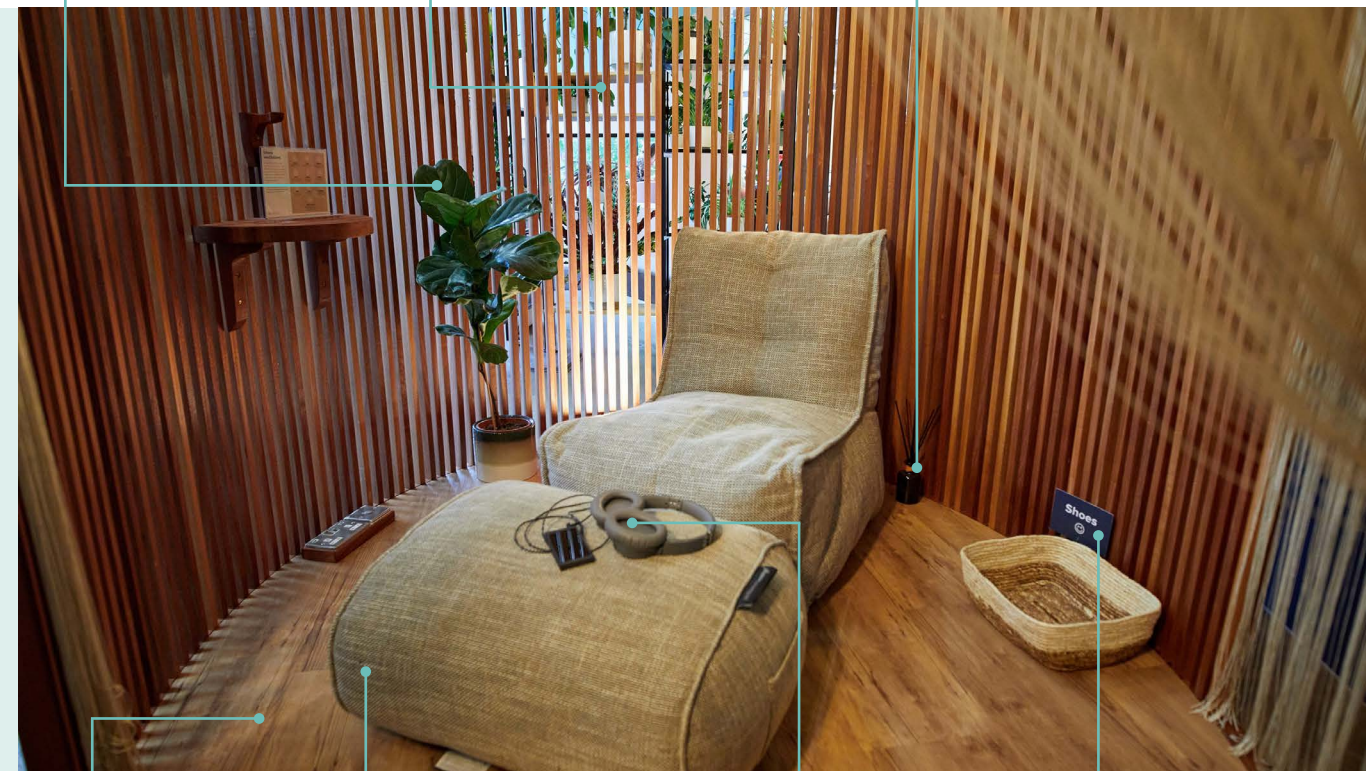


Source: Steelcase

Soft partitions which allow full or partial screening for privacy.

Furniture is positioned in such a way that people are unlikely to walk in front of the space.

Diversity of furniture, which gives employees the choice to lay down – promoting physical restoration as well as mental and emotional.



Source: Inhere Meditation Pods

Naturalistic flooring adds an indirect connection to nature.

Soft furnishings provide a textural difference from the office chairs, helping users to shift their focus from work to rest.

Headsets provided for acoustic restoration and meditation.

Prompt to remove shoes, bringing a sense of 'home' into the office.





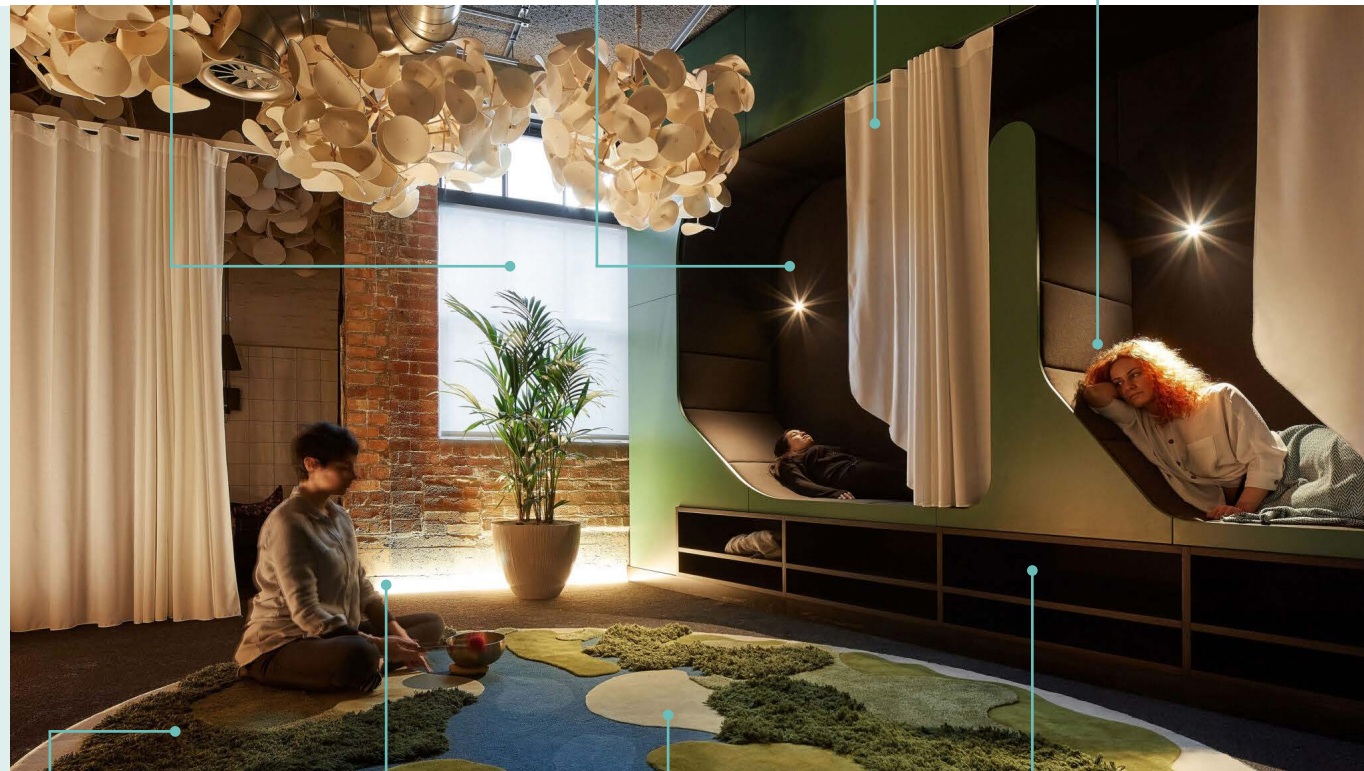
**Large scale:** This example demonstrates multiple different spatial strategies to support multiple occupancy restorative spaces.

Natural light diffused through the use of sheer blinds.

Recessed spaces provide areas for individuals to retreat to and find refuge.

Curtains which give occupants both control and privacy.

Reclined seating supports physical restoration.



Floor mat encourages users to move, stretch or sit in the way they would like to.

Low level artificial light so as not to visually overwhelm the space.

A diversity of soft textures and natural colours provide subtle visual and tactile stimuli.

Cubbies provide space for users to take off shoes, marking a transition from office to restoration space.





# Closing Thoughts

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Incorporating restorative spaces in the workplace can support the emotional, mental, and physical wellbeing of employees. Designed well, they can also contribute to a sense of belonging within the workspace, and further, to employees feeling supported by their organisation.

As a design community, we can highlight the benefits of restorative spaces to users, specify solutions that support the wellbeing of office goers, and communicate the enticing benefits to clients, so that they understand why it is worth investing in these spaces.

## Key considerations

Interface, Inc. who co-authored this guide, are experts in designing sustainable flooring that supports the evolving needs of the user. Interface Design Studio has identified three considerations that need to be assessed before designing a restorative space into a scheme:

1. The current spatial features dedicated to employee wellbeing.
2. Where employees currently go when they need time alone.
3. Whether employees feel comfortable and supported in their workspace.

These will help when identifying clients' needs and discussing the opportunities available to them - even if they have limited space. After all, restorative spaces really can be designed and implemented at any scale.





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To capture insights from industry and thought leaders, **Interface** have co-authored a series of papers to explore the value of human-centred design, understand how nature can inspire the creation of positive spaces and examine the future of sustainable buildings. Interface want to share their pioneering approach to human-centred design and help architects, designers and decision makers pave the way towards innovative ways of creating sustainable buildings with wellbeing at their heart.

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