

THE SCIENCE BEHIND THE **SENSORY SPACE**

A WHITE PAPER REPORT FROM GEBERIT

May 2018

DESIGN
MEETS
FUNCTION



SENSES WORKING OVERTIME

We live in a busy world. A non-stop, connected world that can be difficult to navigate and often seems impossible to switch off from. Our senses have to battle with relentless stimulation, distraction and disruption – a constant ‘buzz’ of information vying for our attention everywhere we go.

Without respite from this state of being ‘always on call’, our well-being and sense of maintaining control of our lives are in jeopardy.

By understanding and taking into account the pressures created by the information overload of modern living, architects and designers can design bathroom solutions that provide something of an antidote to our ‘always-on’ world – even if only for a short while.

By expanding their repertoire in the choice of materials and design expertise, it’s now possible to push the envelope further than ever.

“PAYING ATTENTION ISN’T A SIMPLE ACT OF SELF-DISCIPLINE, BUT A COGNITIVE ABILITY WITH DEEP NEUROBIOLOGICAL ROOTS - AND THIS COMPLEX FACULTY IS BEING WOEFULLY UNDERMINED BY HOW WE’RE LIVING.”

MAGGIE JACKSON

Maggie Jackson is an award-winning author and newspaper columnist known for her coverage of social issues, especially technology’s impact on humanity.

A WORLD OF DISTRACTIONS

Life today is busier than it's ever been. Environments noisier. Demands weightier. Every day, torrents of information cascade into our lives and compete for our attention. Through our eyes alone we take in around 10 million pieces of information every second. And that's just one of our senses! It often feels that, wherever we go, we're bombarded with distractions and there's simply no escape.

The irony is, even though we've become increasingly attuned to our own feeling of 'wellness', we find ourselves struggling to actually take care of it. The result? A feeling of being overwhelmed; unable to take control of matters and achieve a sense of balance and peace.

THE HEALTH IMPLICATIONS OF NOT BEING ABLE TO SWITCH OFF

PROFESSOR MARK CROPLEY, a leading psychologist at the University of Surrey, believes our inability to switch off is having potentially devastating consequences.

"MOBILE COMMUNICATION HAS INCREASED TENFOLD OVER THE LAST TWO DECADES... OPERATING CONTINUOUSLY WITHOUT ADEQUATE PSYCHOLOGICAL RECOVERY IS ASSOCIATED WITH A RANGE OF HEALTH PROBLEMS, INCLUDING, CARDIOVASCULAR DISEASE, FATIGUE, NEGATIVE MOOD AND SLEEP DISTURBANCE."



73% OF PEOPLE STRUGGLE TO SWITCH OFF FROM TECHNOLOGY

SOURCE: GEBERIT SURVEY, MAY 2018

A glance at the figures shows clear evidence of the issues, but little guidance in resolving them.



73%

OF PEOPLE STRUGGLE TO FIND TIME TO RELAX

78%

OF PEOPLE SPEND MORE TIME ONLINE THAN SLEEPING

6.8

THE AVERAGE HOURS SPENT ONLINE EVERY DAY

4.6

THE AVERAGE HOURS SPENT ON OUR PHONES EVERY DAY

56.2

THE DAILY AVERAGE TIMES WE CHECK OUR PHONES

A recent survey conducted by The Sleep Council (an impartial advisory organisation raising awareness of the importance of sleep to overall health) examined the aspects of life that were most affected by this inability to switch off from the world, relax and enjoy quality, re-energising sleep.

THE ASPECTS MOST AFFECTED BY SLEEP DEPRIVATION...

53%

ENERGY LEVELS

52%

MOOD

36%

HEALTH

23%

WORK PERFORMANCE

21%

PERSONAL RELATIONSHIPS

SOURCE: THE SLEEP COUNCIL:
THE GREAT BRITISH BEDTIME REPORT, 2017

Clearly, being able to create some sort of buffer between ourselves and the world around us, even for short periods of time, is something that would definitely be beneficial to our overall health and general sense of well-being.

SOURCE: GEBERIT SURVEY, MAY 2018



THE SENSES

Finely-tuned and always on alert, our senses register everything around us. And although this activity is often subconscious, it nevertheless draws deep upon our energy reserves. This is why it's crucial that we do everything we can to welcome into our lives every opportunity to relax and recharge our batteries.

BIOPHILIC DESIGN

Derived from 'biophilia', the Greek word describing the love of nature, Biophilic Design pays respect to our senses and our genetic connection to the natural world built up through hundreds of thousands of years of living in agrarian settings.

From pot plants in our workspaces to living walls, to creating spaces that revel in the natural landscape or interact with beautifully designed gardens, Biophilic Design utilises natural principles to create a human-centred approach. It's an approach that's becoming increasingly popular and believed to bring a selection of benefits to our health and well-being.

Typically, the main areas of focus within bathroom design include materials, textures, colours and patterns. Obviously, the surfaces that are seen and touched are hugely important. However, there are other aspects that also warrant consideration.

Like our senses, these features operate at a deeper level; beneath the surface. More than just being about looking good, these elements directly contribute to us feeling good.

→ AIR QUALITY AND VENTILATION

Fresh air, not masked with chemicals and artificial fragrances

→ NATURAL AND ARTIFICIAL LIGHTING

Lighting systems with sensitivity to our needs

→ ACOUSTIC COMFORT

Quiet spaces of peace and tranquility



WITH RESPECT TO WELL-BEING

With 'well-being' being one of the fastest-growing consumer priorities in interior design, it's imperative that architects and designers take it into account – whilst of course, never losing sight of the practical and commercial pressures of the world they operate in.

The bathroom is much more than the functional space that the name implies. A well-designed bathroom should offer tranquility. It should be a place of respite from the world and its worries. An environment where the natural balance of our overworked senses can be restored.

Gone are the days when consideration is solely given to features such as beautiful ceramics and stylish feature fittings. Equally important is the unseen functionality that takes place behind the wall – the piping, frames and drainage – operating with quiet efficiency, unseen and, as much as possible, unheard.

COMFORT AND WELL-BEING WITHIN THE OFFICE ENVIRONMENT

Several independent medical research surveys have established that indoor air quality has a major influence on the health, comfort, well-being and productivity within the office scenario.

Furthermore, research conducted by Cundall (engineers and sustainability consultants) within office locations in London reveal that when positive action is taken towards a more natural and holistic approach to designing working environments, staff engagement, productivity and perceived well-being all increase.

THE SENSES THAT MATTER



AUDITORY

The things we experience through our hearing play a key role in nurturing and healing. Having a place of escape from the clamour and din of everyday life is calming; creating a natural sedative for the body and mind.



VISUAL

80% of our sensory impressions are registered through vision. Our eyes take in almost unimaginable quantities of information all the time (millions of details every second).



OLFACTORY

The human nose is very sensitive, able to detect millions of different aromas. Plus, being linked to our memory, our sense of smell is highly emotive – triggering emotions and creating connections.



KINESTHETIC

Our sense of touch is a defining and fundamental part of our daily experience. Indeed, so essential is it to our sense of well-being that we use the word 'feeling' to describe our sensitivities and emotional state.

“...I FEEL GOOD”

SOURCE: JAMES BROWN – THE GODFATHER OF SOUL.



OUR AUDITORY SENSE

Typical sources of unwelcome noise

OUR ABILITY TO DETECT SOUND ALLOWS US TO DECODE WHAT IS HAPPENING IN THE WORLD AROUND US.

FROM COMMUNICATION TO ENTERTAINMENT AND EVEN DANGER, THE SOUNDS WE PROCESS OFTEN DICTATE OUR BEHAVIOUR.

JUST AS IMPORTANT HOWEVER, IS OUR ABILITY TO FIND SANCTUARY FROM SOUND WHEN WE NEED IT.

SILENCE IS GOLDEN

In today's high-volume, fast-paced, hyper-stimulating world, we often find ourselves wanting to switch off – perhaps enjoy an undisturbed night's sleep.

Just think how much hotels invest in providing the ideal sleeping experience for their guests. Expensive beds, super comfortable mattresses, pillows, bedding... every detail of comfort contributing to a good night's sleep is considered. Except perhaps the sound from the bathroom on the other side of the wall. A sound that no one wants to hear.

In close-quarter environments such as hotels (or even offices that might be situated in close proximity to bathroom facilities) the need to minimise bathroom sounds is particularly important.

Driven by meeting this need, clear advancements have been made in the world of sound and acoustics, resulting in innovations that include decoupled pre-walls and acoustically optimised pipework – sound-proofing solutions that make a significant contribution to the creation of quieter, calmer, more relaxing environments.





EXAMINING THE VISUAL

THE ARRIVAL OF DAYLIGHT AS MORNING ADVANCES IS NATURE'S KEY TO STIMULATING BOTH BODY AND MIND; ENCOURAGING WAKEFULNESS AND INCREASING ENERGY. UNFORTUNATELY, EXPOSURE TO LIGHT SOURCES DURING THE SMALL HOURS OF THE NIGHT ALSO STIMULATES OUR SENSE OF ALERTNESS - POSING A PROBLEM FOR ENJOYING HEALTHY REFRESHING, RE-ENERGISING SLEEP.

THE 'LIGHT' TOUCH

It's well understood that light can influence our moods. Being attuned to this fact (and how light reacts with different surfaces, especially at night) allows us to use light sympathetically to complement our body's rhythms and moods, not just to help us orient spaces in a purely functional way.

Blending with selected colour schemes, **orientation lighting** (in a variety of different hues) is used to create a soft, directional glow that eliminates the need to switch on additional lighting in the middle of the night, thus helping to preserve the sanctity of sleep.

The aim in designing the perfect bathroom should always be to create a calming, considerate experience, mimicking natural lighting wherever possible and delivering illusions of space and depth through the careful selection of materials and patterning.

Of course, the creation of space need not be illusory. With the right design ethos, space saving considerations are naturally an integral part of the process. Bathroom furniture ranges that conceal their storage capabilities can be used to create environments that, being free of unnecessary clutter, engender feelings of relaxation and calm.



TOUCHING ON THE KINESTHETIC

THE SENSATION OF TOUCH IS A FUNDAMENTAL PART OF OUR DAILY EXPERIENCE. MORE THAN SIMPLY ALLOWING US TO GATHER INFORMATION ABOUT OUR SURROUNDINGS, TOUCHING INFLUENCES THE WAY WE FEEL, TO THE EXTENT THAT IT'S A FACTOR IN WHAT WE BUY, WHO AND WHAT WE LOVE AND EVEN HOW WE HEAL.

THE 'FEELS GOOD' FACTOR

Humans have a deep compulsion to reach out and touch. To keep our fingers busy. It's a drive that is believed to be a throwback to infancy and how we created our first connections with the world around us.

A deep understanding of the importance of the sense of touch has allowed bathroom designers and manufacturers to explore and adapt the ways in which we interact with our spaces and the technology within them.

A TOUCHING EXPERIENCE

By taking into account the needs of the individual, how the bathroom is used and what needs to be stored away and what needs to be easily accessed, designers can create furniture, storage and ceramics that are centred on ergonomics and functionality, but never at the expense of style and comfort. One area where comfort is an obvious key consideration in the design of a functional item is in the **development of heated toilet seats**.

The range of materials available to bathroom designers today is huge – working surfaces including glass, metal, stone, beautifully grained wood... textures that cry out to be touched. **Take KeraTect® for example. A special ceramic glaze with an almost irresistibly touchable surface that's smooth, hygienic and very strong.**

Modern flush plates are constructed with durability and functionality in mind, but that doesn't mean they can't be beautiful in their own right.



SMART AUTOMATION / NO-TOUCH TECHNOLOGY

Designers and specialist engineers are also taking effortless, friction-free experiences to a whole new level. **For example, automatic sensing technology built into taps, lids and flushes not only minimises the spread of germs and relieve concerns about cleanliness and hygiene, they offer respite to our overworked hands.**



OUR OLFACTORY SENSES

ALL THINGS ARE RELATIVE AND, WHEN COMPARED TO MANY OTHER ANIMALS, THE HUMAN SENSE OF SMELL MAY SEEM LIMITED. THAT BEING SAID, OUR OLFACTORY ABILITIES ARE WONDERFULLY ACUTE, ALLOWING US TO RECOGNISE AND IDENTIFY AN EXTRAORDINARY AMOUNT OF DIFFERENT AROMAS.

WAKE UP AND SMELL THE COFFEE

Think for a moment of the power of smelling salts. It's quite remarkable how the briefest whiff of smelling salts can magically revive a person from the deepest of dead faints.

The example of regaining consciousness is rather dramatic, but it's true to say that our sense of smell has real power within our psyche. Aromas have long been used to lift the spirit and restore feelings of well-being and contentment.

In the bathroom, unfortunately, the opposite is all too often the case.

The most popular methods for handling unpleasant odours within the bathroom scenario have been to mask them using overpowering chemical sprays, or remove them via loud and usually rather inefficient odour extractors.

The latest fresh thinking in odour extraction technology handles the matter rather differently, efficiently cleaning the air within the space by neutralising unwanted odours through replaceable carbon filters. Once cleaned, the fresh air is then gently breezed back into the room, ensuring a genuine odour-free environment.

Efficient odour extraction systems are also pre-programmed to shut themselves off after use, so energy consumption is kept to an environmentally-friendly minimum.



CONCLUSION

New ideas and pioneering technologies focused on well-being have created a wealth of opportunities for creating inspiring spaces that blend high-quality design with superior functionality and innovative engineering.

Geberit's Science Behind The Sensory Space approach positions it at the forefront of the 'well-being through design' movement, helping architects and designers uncover all of the ways that the science behind designing bathroom spaces can enhance our lives - across all sorts of levels.

With a greater choice of materials, design and engineering experience behind them, the architects and designers who choose Geberit can give free reign to their vision, exploring their options and pushing the boundaries of what's possible.

The aim of sharing our thinking on the Science Behind the Sensory Space is to help architects and designers create spaces that don't just take our senses into consideration, they embrace them - actively seeking to soothe and restore harmony amid the increasingly demanding pressures of modern living.

WITH SIGHT, SOUND, SCENT AND TOUCH AS THEIR FOCUS, GEBERIT'S EXPERT TEAMS HAVE DRILLED DOWN INTO THE KEY INGREDIENTS FOR BATHROOM DESIGN THAT INVIGORATE, IMPRESS AND REFRESH - TRANSFORMING OUR FUNCTIONAL PLACES INTO SPACES THAT DELIVER FEELINGS OF RESPITE, CALM AND A TRUE SENSE OF WELL-BEING.

APPENDIX

THE GEBERIT PRODUCT RANGE

Engineered to meet customers' demands

AUDITORY



GEBERIT SILENT-DB20
Acoustic drainage



GEBERIT DUOFIX
Pre-wall installation frames



GEBERIT AQUACLEAN
Mera quiet flush & automatic lid



GEBERIT BATHROOM COLLECTION
Soft close seats

VISUAL



GEBERIT MONOLITH PLUS
Ambient light, light-touch flush

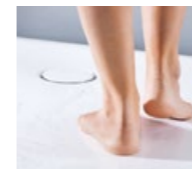


GEBERIT AQUACLEAN
Mera orientation lighting



GEBERIT BATHROOM COLLECTION
Mirrors with lighting

KINESTHETIC



GEBERIT SETAPLANO
Warm and smooth - touch shower surface



INFRA-RED FLUSH PLATES
Touchless



INFRA-RED TAPS
Touchless

KeraTect®



KERATECT
Smooth to touch



GEBERIT ACANTO
Ergonomic design



GEBERIT AQUACLEAN
Heated and automatic opening seat

OLFACTORY



DUOFRESH
Odour extraction



GEBERIT AQUACLEAN
Odour extraction



GEBERIT MONOLITH
Odour extraction

ABOUT GEBERIT

Set to make its mark in the UK, the Geberit Group is the European market leader for sanitary products. A respected Swiss brand, it has a well-established reputation for delivering premium quality products, inspiration and innovation across every aspect of its business.

For years Geberit has maintained a very strong presence within Europe, offering unique added-value within both the sanitary technology and the bathroom ceramics sectors.

Sustainability has long been part of the Geberit identity, for example, in its pioneering work in water-saving products, new logistics solutions, energy-efficient production plants and its delivery of responsible training within the industry.



TO FIND OUT MORE ABOUT GEBERIT'S SCIENCE BEHIND THE SENSORY SPACE AND HOW, THROUGH BIOPHILIC DESIGN, INSPIRED THINKING AND VISIONARY SUSTAINABILITY IT IS RESHAPING THE SPACES AROUND US, GO TO WWW.GEBERIT.CO.UK

