

SPRING 2016

Interface®



In this issue

Are green buildings in Asia biophilic?

By Dr Nirmal Kishnani

Investing in nature

DESIGN SPACE



EM551, EM552 and EM553 in Broad

A GATEWAY TO CREATIVITY

Nature shows us how to enliven the spirit and awaken our senses from the ground up. It is the very root of creativity and well-being. Invite it inside and witness its power to positively influence human motivation and productivity. Introducing the Equal Measure™ Collection.

Interface® | A Foundation For Beautiful Thinking.

beautifulthinkers.com



Rob Coombs
President and CEO
Asia-Pacific, Interface

Welcome note

It has been three years since our last issue of Design Space, but it's great to be back with a brand new design, packed with exciting interiors, products and design theory!

The world has changed significantly over the last few years; the objectives of governments and industries have evolved and now include a stronger focus on sustainability. We are proud to have come such a long way since 1994 when our founder, Ray Anderson, began our campaign for Mission Zero® by pioneering a more sustainable way of business. Today, our company continues to lead with initiatives like Net-Works™ and products that use 100% recycled yarn – but what is truly great is seeing so many other organisations joining the fight to create a better tomorrow.

As we move forward, Interface's focus is not just to eradicate our negative impact on the environment, but to create a positive effect on the world around us. Biophilic design then, is the prominent school of thought at Interface – it's what inspires us. Last year we sponsored the completion of a study called *Human Spaces: The Global Impact of Biophilic Design in the Workplace*, which shows how natural elements in the office can help our well-being, productivity and creativity. In this issue, read about how this trend is taking over the industry in *The Biophilic Effect*. Also, look out for guest writers from our industry, with the likes of Dr Nirmal Kishnani, Vice Dean of NUS School of Design and

Environment and Editor-in-Chief of FuturArc; and Richard Hassell, co-founding Director of WOHA. If you're still craving more information, head on down to humanspaces.com, where we have many more articles on biophilic design for you!

As design leaders, we understand the need for products that fulfil the requirement for both beauty and functionality and I am proud to say that many products that perfectly meet this need have made it through our drawing boards over the last few years. One exceptional development is our new narrow module size – named Skinny Planks™ – that brings an added dimension to floor design. Interface now also carries a fully customisable hospitality range to fit a broad range of requirements.

The projects featured here are carefully selected from across Asia-Pacific, so I'm sure they'll be a delight to you. I hope this issue inspires you to bring your creative vision to life and surpass boundaries in your designs for tomorrow, creating the foundation for beautiful thinking.



Read it online at
interfacedesignspace.com



Design Space is a magazine published by Interface Asia that reaches out to the architect and interior design community. It showcases a mix of cutting-edge design interior projects that Interface has been a part of, as well as opinion leader commentaries on topics such as industry trends and sustainability.

The publication also communicates news and updates from Interface; including product, sustainability and innovation stories.

In conjunction with the magazine, there is an online blog version at interfacedesignspace.com that includes additional content from the region, and is updated throughout the year.

interface.com
interfacedesignspace.com

Editor-in-Chief
Clark Harris

Executive Editor
Shaun Jansen

Writer
Jamie O'Brien

All editorial enquiries to:
Interface Singapore Pte Ltd
80 Marine Parade Road,
#22-03/05 Parkway Parade
Singapore 449269
tel: +65 6478 1510
shaun.jansen@interface.com

Design concept by
INL Singapore Pte Ltd
491B River Valley Road
Valley Point, #15-01
Singapore 248373
karin@inl-agency.com
inl-agency.com

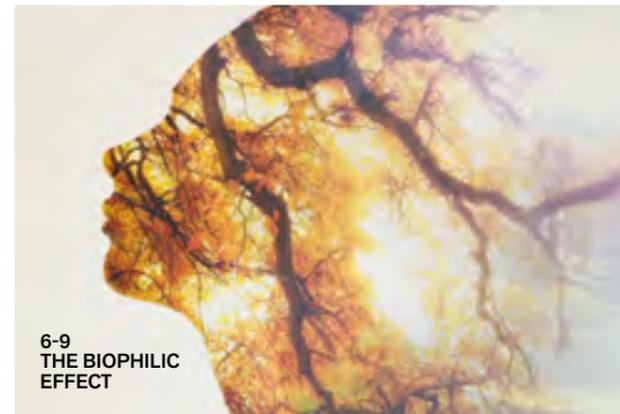
Printed in Singapore by
NPE Print Communications Pte Ltd
39 & 41 Kallang Place
Singapore 339169

Cover product details
Near & Far™ Collection, NF400 - Linen and Felt, Human Nature™ Collection, HN810 - Limestone in Ashlar

© 2016 Interface Singapore Pte Ltd.
All rights reserved.

Contents

The biophilic effect	6
Four analogues of biophilic design	10
Human spaces	18
Biophilic design in Asia	20
Good design goes a long way	26
Eastern spice	30
Space to think	32
Dedicated to hospitality	34
Interfacedesignspace.com	38
The subtleties of nature	40
Saving the oceans	44
An eye for design	46
Are green buildings in Asia biophilic?	48
Investing in nature	54
The rainbow connection	58
Sustaining an ancient art form	62
From across the globe	64
Lou Reed, millennials & icebergs	67
Fibre to fibre, backing to backing	70



6-9
THE BIOPHILIC EFFECT



20-25
BIOPHILIC DESIGN IN ASIA



34-37
DEDICATED TO HOSPITALITY



40-43
THE SUBTLETIES OF NATURE



54-57
INVESTING IN NATURE



62-63
SUSTAINING AN ANCIENT ART FORM

Related Articles

biophilic design
 Color design
 environment human nature
 inspiration interior
 light nature relax



Rob Coombs
 President & CEO
 Asia-Pacific, Interface

Rob leads Interface's business operations in Asia-Pacific including Australia, New Zealand, South East Asia, China, India, Japan and Korea. He has more than 30 years of experience in marketing and senior management positions, from the fashion industry, to FMCG and the carpet industry. Working in multinational focused roles, Rob has business leadership experience in Australia, Europe and Asia.

Joining Interface in 1988, Rob has been with the company for more than 20 years and over this period worked closely with Ray Anderson, the late founder of Interface. Sharing Ray's passion for sustainability, Rob ensures Interface Asia-Pacific continues to be a leading proponent of sustainable business development via its Mission Zero® commitment.

The biophilic effect

Our well-being in the workplace demands design that connects us to nature

By Rob Coombs

We have all been there, trying to focus on a demanding task, but workplace disruptions and distractions just won't allow it. Your mind is constantly fatigued and the task takes longer than it should. Could workspaces that incorporate elements of nature provide a more productive setting? One that is less mentally draining, even restorative, improving our cognitive capabilities and enabling more consistent performance levels?

Mounting evidence suggests that they could. Take Genzyme Corporation, a world-leader in biotechnology. Its corporate headquarters, opened in 2004, features biophilic design elements such as a clear glass exterior and large windows providing natural light, indoor gardens and water features. After 18 months in the new building, more than three-quarters of employees felt that being able to

see outside, combined with natural elements inside the building, improved their sense of well-being. Additionally, a study conducted by Heschong and Loftness on an American utility company call centre in 2003 found that employees who had views of vegetation were more productive. These workers processed calls up to 12% faster, and performed up to 25% better on mental and memory tests compared to those who could not see vegetation.

Today, although typical modern offices boast comfortable air-conditioned environments and ergonomic office chairs – a seemingly unprecedented level of comfort – studies show that stress levels have risen dramatically across the globe. The open office concept has gained popularity for its benefits on collaboration, but has fallen short on providing quiet spaces to work in. >



Experts believe scenes of nature may stimulate a reward structure in the brain



< Mobile connectivity brings flexibility and efficiency, but at the same time makes it difficult for people to leave work behind. These smart systems also disrupt human connections in the workplace. Workers could find themselves increasingly chained to technology at the expense of a strong connection with other people and the surroundings they share. Continuing urbanisation and population growth will only add to these stress-filled work environments.

So what is biophilic design and why is it a viable solution? Popularised in 1985 by American biologist Edward O. Wilson, Biophilia is hypothesised as the innate relationship between humans and nature, and concerns our need to be continually connected to nature. Wilson and others think that certain attributes of nature to which human beings are instinctively drawn are not just beneficial for survival, but also for our daily well-being. A growing body of evidence showing that contact with nature has significant emotional, physiological, and social benefits for human beings suggests this will be key to a healthy workplace.

At Interface, we sponsored a study entitled, *Human Spaces: The Global Impact of Biophilic Design* in the Workplace, which surveyed 7,600 office workers across a variety of roles and sectors, spanning 16 countries across the world. We found that workers in office environments with natural elements, such as greenery and sunlight, have a 15% higher level of well-being, are 6% more productive, and 15% more creative.

The study revealed that the two most requested elements in the workplace are natural light and indoor plants (followed by quiet spaces, a view of sea or water, and bright colours). In fact, providing access to natural elements – especially natural light – positively affects the human mind so subconsciously there is evidence that it reduces sickness and absence rates.

Bill Browning, founding partner of Terrapin Bright Green, and one of the green building industry's foremost thinkers and strategists, explains: "The deep appeal of colour is an attribute of people's adaptive response to the natural world which, through evolution, has assisted in the location of food and water, and with

way-finding." It was found that while many colours can have cultural meanings that vary significantly from place to place, office colour schemes that incorporate accents of green, blue and brown were more predictive of employee happiness, productivity and creativity than those that merely incorporated blank white walls.

Experts believe scenes of nature may stimulate a reward structure in the brain that seeks information through the senses.

Interestingly, it is the variation in patterns, textures and colours of nature that brings us pleasure.

Rising to the challenges of a rapidly changing world will demand environments where we can perform at our best – and be at our most creative. More than ever, we must work to restore and revitalise depleted systems: what better first step than to move closer to nature, the resource that provides us with life?



Related Articles

 **Four Analogues of Biophilic Design**
Page 10-17

 **Biophilic Design Asia**
Page 20 -25

 **Are Green Buildings in Asia Biophilic?**
Page 48-53

BIOPHILIC ANALOGUES

Four analogues of biophilic design

We have learnt that working environments incorporating natural colours, textures and movement have a positive effect on efficiency and employee well-being, here are four analogues – or design models – that combine to help us create these biophilic spaces

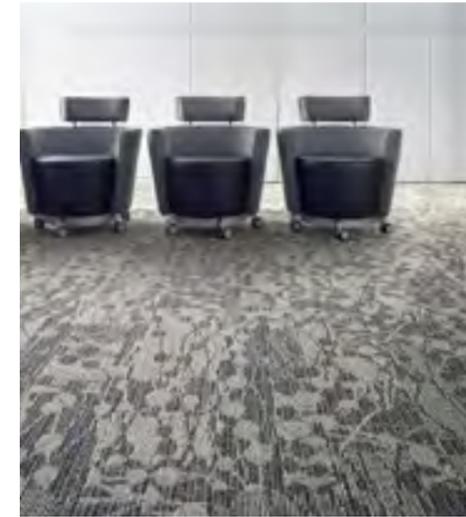
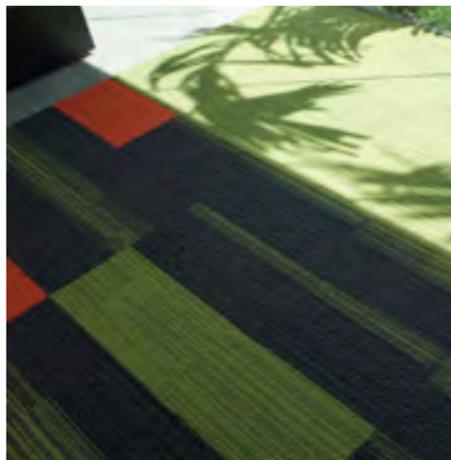
By Daniel Blois

FOLLOWING NATURE'S MODEL

The direct presence of nature in a space providing connections with natural elements

This analogue brings the feel of the natural world inside, to create a physiological, psychological and cognitive connection to nature. It encompasses a direct, physical presence of nature in a space providing meaningful connections with it, particularly through diversity, movement and multi-sensory interactions.

This often follows the visible forms of nature such as indoor plants, natural colours, or even structures and patterns that mimic the look of natural elements. This is not limited to what is placed in an interior, but also to providing sensory access to the outside world. Windows are crucial here as they provide natural light and views of nature.

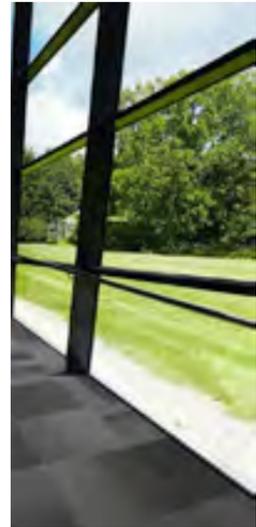


Daniel Blois
Design Director
Asia-Pacific, Interface

Born in Tokyo and raised in California, Daniel Blois studied Environmental Psychology at the University of California Berkeley. Recognising a passion for design, he furthered his education in interior design and architecture in San Francisco.

In 1992, Daniel joined Interface as the creative services manager in Japan, before being promoted to marketing manager and then to managing director. After moving to Singapore in 2003, he introduced the Interface vision of sustainable product design and stewardship to audiences throughout Asia as product and sustainability manager.

Daniel has been the Asia-Pacific regional design director for Interface since 2006, moving from Singapore to Thailand with his wife and two children in 2011. He continues his work leading the company's design direction based at the Interface Thailand manufacturing facility where he created the istudio-NEST, the company's design studio for product development and creative services.



BIOPHILIC ANALOGUES

PROSPECT

An extensive view over a distance – the ability to see from one space to another

Prospect relates to our innate and learned desire to be able to see beyond our immediate surroundings. This has two applications in a workspace: it facilitates way-finding and navigation through a structure, and it helps bring energy into a space.

Open areas encourage optimism and vibrancy, which are essential for collaborative areas. This can be seen in open-plan offices, those that use transparent barriers, or where partially open spaces are used to create intrigue.





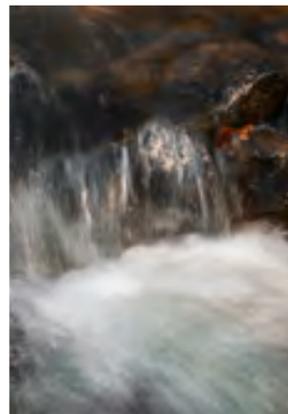
BIOPHILIC ANALOGUES

VARIATION & MOVEMENT

References to patterns, textures or colour transitions that exist in nature

Variation & Movement references the contours, patterns, textures or numerical arrangements that persist in nature. Nothing in nature ever stays the same. The ever-shifting sands of the Sahara desert are a perfect example of this – there is something alluring, yet calming

in letting one's eye wander across the contours and shadows in the sand. The diversity of visual elements in this analogue helps to stimulate the brain. This effect can be seen in interiors that use a variety of flooring textures or accents of colour in furniture and fittings.





BIOPHILIC ANALOGUES

REFUGE

A protected place separate or unique from the surrounding environment

Refuge is a place for withdrawal, where the individual is protected from behind and overhead. Usually, the refuge is not entirely enclosed – it maintains some contact, whether visual or aural, with the surrounding environment. Both physically and psychologically, this

provides an inclusive connection to a space for an individual to process and produce. Segregated office areas or booths that provide employees with a quiet place to work are good examples of this theory in action.

Related Articles

 **The Biophilic Effect**
Page 6-9

 **Biophilic Design Asia**
Page 20 -25

 **Are Green Buildings in Asia Biophilic?**
Page 48-53

Human Spaces

Interface is fully committed to the theories of biophilic design and improving human well-being. Human Spaces then, is our pioneering online platform where these ideas can be shared and discussed so that practitioners can benefit from the experiences of others. We have invited experts in the field to share their views and explain how they use these theories to push beyond the borders of interior design and architecture. Find out more about our contributors here and then head down to humanspaces.com to learn more about this growing trend in the built environment



Sir Cary Cooper

Regularly the media's first choice for comment on workplace issues, Cary is recognised as one of the world's leading experts on well-being and stress at work. He is a Fellow of the British Psychological Society, The Royal Society of Arts, The Royal Society of Medicine, The Royal Society of Health, an Honorary Fellow of the Royal College of Physicians and Editor-in-Chief of the *Blackwell Encyclopedia of Management*.

Cary has written or edited more than 120 books. In June 2014, he was awarded a knighthood in the Queen's Birthday Honours list and was also voted HR Magazine's Most Influential UK Thinker 2014.



On humanspaces.com Cary discusses [How to bring an office to life](#) and explores the question: [Are nature-starved offices affecting employee well-being?](#) Cary is co-author of *Human Spaces: The Global Impact of Biophilic Design in the Workplace*.



Oliver Heath

As a leading figure in biophilic design, Oliver works with Interface to raise awareness of the benefits that design inspired by nature can produce. A prominent thinker in the architecture industry and owner of Heath Design Ltd, Oliver is also a writer and TV presenter. Oliver won the BBC's Young Designer of the Year in 1998.

He has been involved in numerous television projects including the BBC's *Home Front* and *Changing Rooms*, Channel 4's *House to Home* and ITV's *Front of House*. Oliver has written columns for the *Observer*, *Friends of the Earth*, *Earth Matters*, and currently writes for *House Beautiful* magazine. His most recent book, *Urban Eco Chic*, defines the practical and aesthetic issues surrounding eco interiors and explains how to create them.



Read [Green: A colour which means much more than envy](#) and [The restorative effect of light](#) to learn about the effects of colour and natural light.



David Oakey

David Oakey, founder of David Oakey Designs, has been the exclusive product designer for Interface and FLOR since 1994, and now leads global efforts in sustainable design, learning from nature and the study of biomimicry.

When founder Ray Anderson declared that Interface would be fully sustainable by 2020, David and his team quickly identified the elements necessary to succeed in sustainable design: innovation, efficient use of materials, and to strive for a complete elimination of waste. He currently serves on the Board of Directors for the Biomimicry Institute and his writings and philosophies have been featured in publications as diverse as *Fortune*, *Fast Company*, *Smithsonian*, and *Interior Design*.



[David Oakey on senses](#) tells us how he believes interiors should be designed with our senses in mind.



Bill Browning

Bill Browning is one of the green building and real estate industry's foremost thinkers and strategists, and an advocate for sustainable design solutions at all levels of business, government, and civil society. He has co-authored books on green development, sustainability and biophilia, and was named one of five people 'Making a Difference' by *Buildings* magazine. He is an honorary member of the American Institute of Architects, a founding member of US Green Building Council's Board of Directors and is the Chair of the Greening America Board of Directors. He served on the DoD Defense Science Board Energy Task Force and the State Department's Industry Advisory Panel.

In 2006, Bill founded Terrapin with longtime partners Bob Fox, Rick Cook and Chris Garvin to craft high-performance environmental strategies for corporations, governments, and large-scale real estate developments.



Bill is co-author of *Human Spaces: The Global Impact of Biophilic Design in the Workplace*.

Related Articles

achitect architecture
biomimicry design
environment
experience
greenbuild inspired
interior story



Biophilic design in Asia

Is biophilic design even more important in Asia?

By Richard Hassell



Richard Hassell
Director, WOHA

Richard is co-founding director of WOHA, an internationally acclaimed architectural practice based in Singapore. He graduated from the University of Western Australia in 1989, and was awarded a Master of Architecture degree from RMIT University, Melbourne, in 2002.

He has lectured at universities around the world, and served as an adjunct professor at the University of Technology Sydney, and the University of Western Australia. Major awards garnered by the firm include the 2011 RIBA Lubetkin Prize and the 2010 International Highrise Award, both for The Met, a high-rise tropical tower in Bangkok, Thailand. A travelling exhibition devoted exclusively to their work opened at the Deutsches Architekturmuseum, Germany, in December 2011, and three substantial monographs – WOHA: The Architecture of WOHA and WOHA: Selected Projects Vol. 1 and 2 – have already been published.



Parkroyal on Pickering Hotel, Singapore

What is biophilia? To me, it's a love and respect for nature. Biophilic design then, is showing that love and respect by preserving and harnessing nature – and working with it.

Humans have always lived within nature, but in the developed world buildings and cities have gradually created a barrier between us and the great outdoors. Biophilic design aims to break down that barrier and reverse the trend by seamlessly connecting indoor and outdoor spaces.

As an architect, this means asking questions that put our relationship with the environment first: How can we build sustainably? How can we encourage diverse natural

environments? How can we give back to nature? How can we use the natural environment to enhance our lives without destroying it?

At WOHA, along with my partner Wong Mun Summ, we aim to find the answers to these questions with every project we undertake.

Giving back to nature

We can't escape the fact that construction has a detrimental effect on nature, but we can do everything in our power to limit that impact, and in some cases >

< even create buildings that could generate a profit for nature.

Almost every building project increases the available surface area. By deliberately maximising space for rooftop gardens and green walls we can create a building with more green space than the original site – or even reintroduce green spaces to built-up areas.

For the Parkroyal on Pickering Hotel in Singapore, we introduced 15,000 square meters of green space – which is double the area of the original site and equal in size to the neighbouring Hong Lim Park. Amazingly, local birds, butterflies, insects and bees now inhabit the hotel's skygardens, pools and waterfalls.

A basic human need

Reducing the drain on natural resources is an element of biophilic design, but it goes beyond eco-friendly design and sustainability. Architects can create ecologically sustainable buildings without actively making human lives better.

People are happiest when they can see the horizon, greenery, water, feel a cool breeze, hear the trickle of water or the sounds of nature. If you want a sick, depressed, angry, inefficient workforce, then the best way to do that is to put them in windowless artificial environments with stale air, grey walls, and the low hum of technology. Biophilic design aims to go a step further by reuniting humans with nature and improving our well-being.

We have more to lose, and more to gain

In tropical Singapore, and most of Asia, these theories are even more pertinent. The tropics are an ecologically diverse region, so in a way, we have more animals and plants to lose. Building a megacity in the desert has a terrible environmental impact, but at least the damage to plant life is comparatively low. Here, we have incredibly rich primary rainforests and mangroves to preserve.

We can help to minimise our impact by designing around vegetation, keeping trees and native plants

in their original position or replanting them on site, and making use of locally sourced materials. For Alila Villas Uluwatu, a project completed in 2009 in Bali, we made full use of local recycled timber.

The weather also has a big part to play: sunshine, heat, humidity, and the monsoon rain. Life in the tropics is a constant battle to stay cool, so people are naturally drawn to enclosed, air-conditioned spaces. Life for many revolves around shopping centres in this part of the world, and a modern life can often mean moving from air-conditioned home, to train, to work, to shopping centre, to home again, without ever really being outdoors.

We work long hours in high-stress environments, and our cities often have a space problem, with many working in small windowless offices. Biophilic design looks to interrupt this harmful modern Asian lifestyle by bringing nature indoors, directing people outdoors whenever possible, and harnessing natural resources to make outdoor spaces more liveable.

When planning the School of the Arts in

Singapore, we wanted to harness Singapore's light breezes so that students could spend more time outside. Our design successfully does this, maximising airflow between blocks and gives students space to relax in shaded areas.

Biophilic design in Asia

Singapore is Asia's only biophilic city. Discounting Monaco, Singapore is the most population dense country in the world, but it is the greenest city in Asia and consistently appears in top 10 global greenest city lists (both for being eco-friendly, and for its green open spaces). This is not accidental. The original city planners made an early decision to preserve as much of Singapore's green space as possible, and have planted over two million trees since the 1960s. Even early high-rise social housing projects were designed with green spaces and wind in mind, and today the government continues to make parks and greenery a priority.

These pioneering decisions have allowed Singapore to become the leading Asian city for >



Alila Villas Uluwatu, Bali



School of the Arts, Singapore

< biophilic design today. Our work at WOHA can be seen as a continuation of this, further blurring the lines between interior and exterior spaces.

Governments are beginning to commission projects in South Korea, Japan, India and throughout the region, and we have seen with our work outside of Singapore that biophilic ideas are gaining traction with apartment towers, luxury resorts, mass-transit stations, condominiums, hotels, educational institutions, and public buildings in Indonesia, China, Thailand and Australia.

By embracing biophilic design we have built up quite a collection of awards for a Southeast Asian practice. In 2007 we were awarded the Aga Khan Award for Architecture for 1 Moulmein Rise, and collected four awards in the RIBA International Awards of 2011 and 2010 for Alila Villas Uluwatu, School of the Arts, The Met and Bras Basah MRT Station. We also won the 2011 RIBA Lubetkin Prize and the 2010 International Highrise Award, both for The Met, along with two titles in two consecutive years at the World Architecture Festival in 2009 and 2010.

However, we still have a long way to go when the vast majority of new projects pay very little attention to nature – which is especially true for office space. Transport hubs, parks, condominiums and hotels are an excellent start, but the workplace is where biophilic design can have the greatest impact. Not just for well-being, but for the bottom line. Happy and healthy employees work more efficiently, take fewer sick leave days, and are more creative.

We need to help businesses and developers think differently about how they choose and plan office space. Instead of looking at a building and calculating how many desks can fit in an open plan office (and how much profit each person can generate without a thought for productivity), we need to show them how quality of environment is directly proportional to profit. This can also have a profound effect on the image that a company projects, both to people that visit the office, and when dealing with happy and healthy employees.

What does biophilic design mean to you?

I'd like to kick start a discussion about biophilic design in Asia, to help popularise its theories and to find out what it means to different architects and designers working in Asia.

What does biophilic design mean to you? Is it possible for biophilic design to become as commonplace as eco-friendly buildings are today? What do we, as practitioners in Asia, need to do to get there? What are the obstacles to biophilic design that you experience in your own work or county?

If you are an architect, interior designer or developer, think about some of these questions and how you can get involved. We'd love to hear what you have to say at: humanspaces.com

Related Articles



The Biophilic Effect
Page 6-9



Four Analogues of Biophilic Design
Page 10-17



Are Green Buildings in Asia Biophilic?
Page 48-53



CASE STUDY

Good design goes a long way

After using Interface carpets in an office interior project, the designers at Fuji Business were so impressed that they looked to Interface products for their own new office

By Shaun Jansen

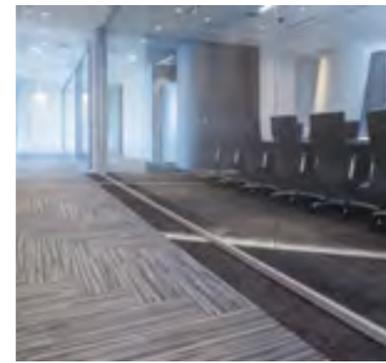
As specialists in workplace design, workstyle consultation, facility and project management, they know good design when they see it!

Hiroka Maruyama, senior designer, also knew our carpets would help when she was faced with a tricky design brief. IT solutions provider Japan Business Systems needed a design that would inspire 'collaboration' and create 'a place where people gather'.

While it can be difficult to equate client requirements with design concepts, her team developed an innovative design that created a sense of unity using road marking inspired lines to realise the concept of 'collaboration'. Beautiful patterns and textures from the Urban Retreat™ and Net Effect™ Collections from Interface were used to naturally guide office workers, while also stimulating their senses.

"The green floor represents the earth, while the blue floor evokes images of the sea. This was based on a desire to bring elements of nature indoors, something, which has long been a part of the industry", says Hiroka. She goes on to explain that carpet and furniture manufacturers that provide nature-inspired products, such as Interface, make it possible to realise this design approach.

This makes the selection process easier for Hiroka, which is why she turned to Interface products when designing her own office. After their form and function helped her meet the needs of Japan Business Systems, she was confident Interface products would be perfect for it. The direction was 'chic and >



Product Urban Retreat™ Collection, Net Effect™ Collection (Japan Business Systems) Human Nature™ Collection (Fuji Business)

Design Fuji Business

Installation Kawashima Selkon



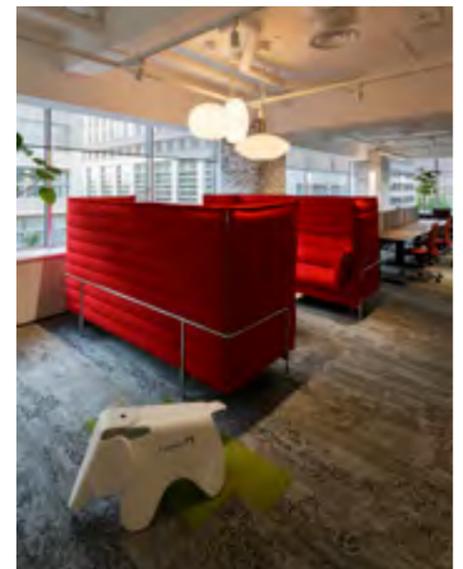
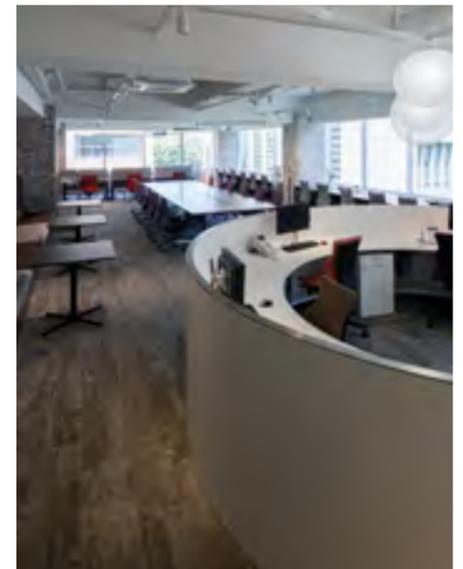
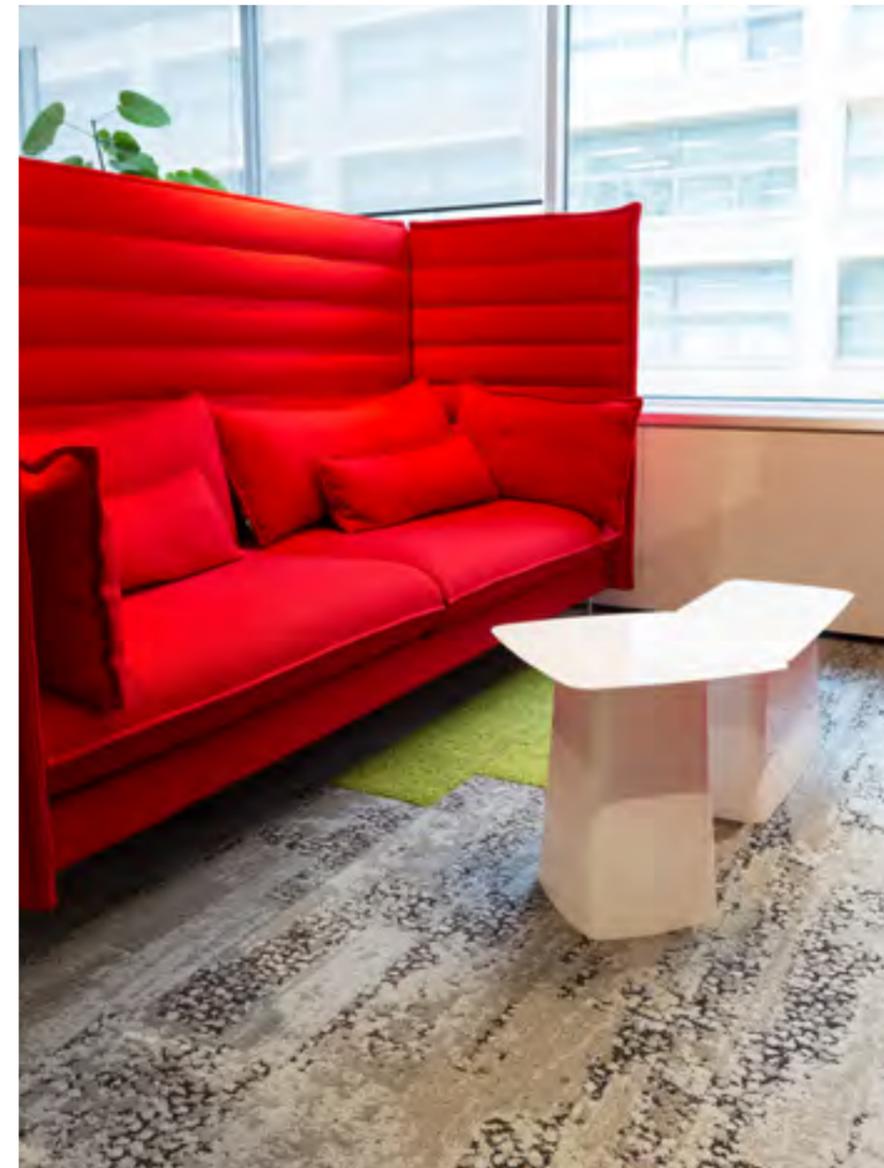
< elegant' with four main characteristics – Mobile, Multi-generation, Motivation, and Marunouchi – aptly represented in the office's name: 'Produce M4'.

Marunouchi is one of Tokyo's most prestigious business districts and their brand new space reflects that elegance. As you step in, you're greeted with pristine white walls and strong textured earth tones, drawing you into the space. Peer deeper into the workspaces and you will be introduced to accented splashes of greens and reds in the form of plants and furniture.

Hot desks, break-out areas and information communication tools were implemented to support the 'Mobile' workstyle requirement. This flexibility caters to the variety of workstyles preferred by different generations and means that employees are not bound by time and place.

When choosing the flooring, the Human Nature™ Collection from Interface with its variety of designs was selected to help motivate and inspire proactive working. Hiroka elaborates: "Because the Human Nature Collection had different

textures with the same colour, it created subtle movement on the floor, which made nature-like movements in the space." Pebble inspired textures morph seamlessly into natural stone textures, while contrasting shag tiles sprinkle the office with colourful surprise. You can tell Hiroka's choices made quite an impression, because customers who visit their office always want to know more about the carpets and flooring design.



One of Naveen's floor designs, provided to architects to show use of colour, pattern and creativity.



Eastern Spice

By Shaun Jansen



Interface India's Design Manager Naveen Borkar has all the technical experience needed to create truly artistic workspaces

Designing interior spaces is an art form, and all artists need a strong foundation of skills to draw on. Starting as a graduate in mechanical engineering and subsequently earning a master's degree in interior design, Naveen explored many fields within the interiors industry – including fixture, furniture and workstation design – before joining Interface. Having worked hands-on with the likes of veneer sheets, laminate boards and glass tops, visualising a workspace and designing a floor to suit it is now second nature to him.

An artist by heart, Naveen was always intrigued by colour, so when he first discovered Interface, he was impressed by its products and their use of colour and pattern. That's what inspired him to join Interface as a designer. Today, he heads up design in India and is responsible for custom carpet and floor designs. "Customisation", says Naveen "is very much an interesting subject as it requires understanding the concept of re-colouring and working to the requirement of architects and designers." To make sure he fully understands each client's

requirements, he makes a point of physically meeting up with them.

Naveen feels proud to have come to this point in his career with Interface. "This is the place where I can enhance my design knowledge, where I can grow", he explains. You can tell how enthusiastic he is about knowledge-sharing from the way his eyes light up whenever he's exposed to a new idea. As much he loves sharing, he loves learning from more senior experts as well.

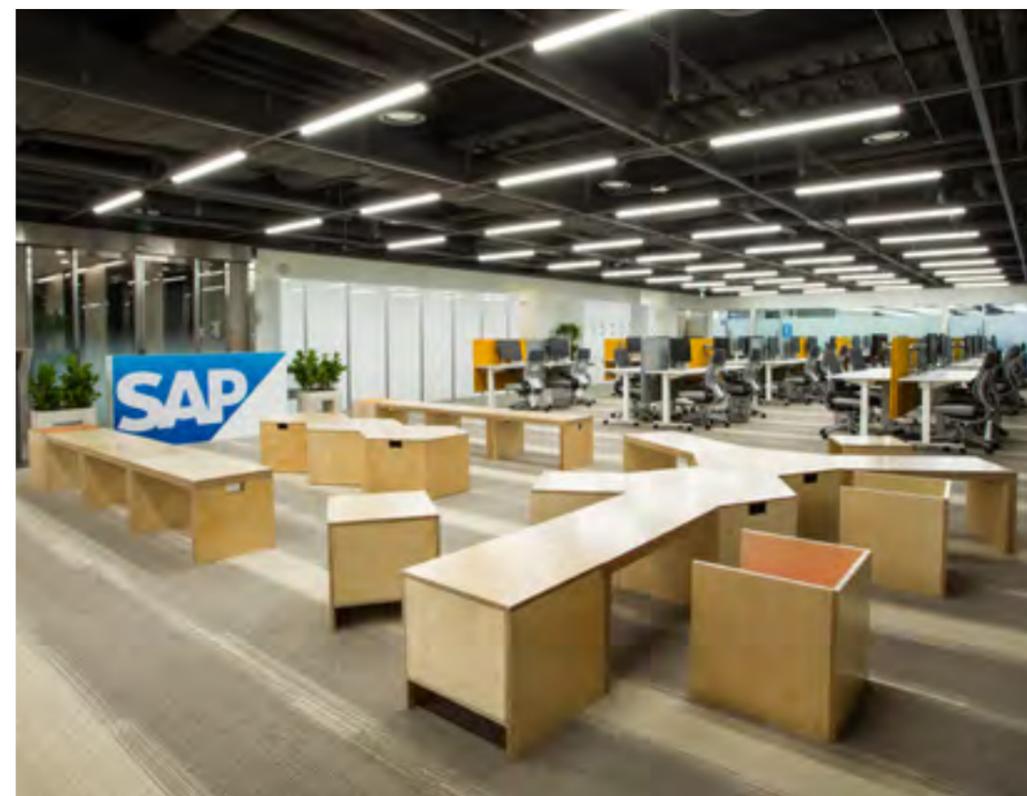
David Oakey, Interface's lead carpet designer, is someone

whom Naveen truly admires. Oakey's use of biophilic design, built from the principles of man's instinctive connection with the natural world, is a great inspiration to him. Naveen says of Oakey: "His designs not only bring nature indoors, but have also increasingly spread the awareness of nature's importance for stress management in the workplace."

Naveen knows that good design should merge the principles of aesthetics and function together – and biophilic design seems to be the perfect way to do that. By bringing nature

into the workspace, he believes it's possible to create stunning interiors, and increase work efficiency. Although much of his work for the corporate world uses muted tones, he hopes that the emerging trend of biophilic design will give him a chance to use more vibrant colours and create more intricate designs.

With both eyes fixed far into the future, Naveen is all geared up to develop his skills as a designer, aspiring to create floor designs that provide the foundations where beautiful interiors come alive.



CASE STUDY

Space to think

Flooring takes centre stage at SAP's collaborative workspace in Seoul

By Jamie O'Brien

SAP designs innovative software solutions for enterprise companies. For their offices in Seoul, Korea, they wanted to totally rethink the space and create interiors that would foster collaboration and group working – it had to be a place where their best minds could get together with clients and create. There were three main requirements in the design brief: Open – they needed the space to be expansive and communal; Mobility – essential for a software solutions company offering advanced mobility solutions; Flexibility – they wanted adaptable, multi-use spaces to help future proof their offices.

Designer Woojin Lee of DMC Plus explains how they came up with the concept for the project:

“After many meetings with the client, our team came up with the idea of a ‘marketplace’ – instantly we knew it was perfect. Traditionally, marketplaces are open, active and vibrant, with constant interaction and conversation.”

Just like a market, the office space created is open and adaptable. Instead of movable and transient market stalls, workspaces are filled with modular desks and dividers, and breakout areas have movable beanbags and park benches.

As the space is largely open, bold patterns, transitions and highlights were employed in the floor coverings to create divisions rather than using traditional fixed walls. This was a brave decision, as it's unusual

to find such strong patterns in a working environment. “It can be too much for a workspace”, added Woojin. The bright colours and bold flooring designs were offset by minimalistic furniture, white walls and light-toned wood grain.

The design used natural, textured tones for work areas and hot desk space, with grass-like irregular lawn flooring encircling and bordering the kitchen and other multi-use spaces. Meeting rooms use bright oranges and marine blues, while striking orange accents create visual bridges between zones.

The Urban Retreat™ Collection was used to create the grassy areas, making use of its transitional tiles to blur the lines

between work and play areas. Net Effect™ carpet tiles bring a sense of moving water to meeting rooms or create pool-like areas among the pebble-inspired floor tiles, simulating the textures created when the ocean meets the shore. On Line™ and Off Line™ are used together to create subtle irregular stripes in working zones so that employees can focus without distraction.

Without the striking floor design, SAP Korea's office might feel soulless and empty – all straight lines and plain white surfaces. By making the flooring the hero, the designers have created a space that feels organic, free flowing and multi-textured – the perfect space for ‘outside the box’ thinking.



Product Net Effect™ Collection, Human Nature™ Collection, Urban Retreat™ Collection,

Design DMC Plus

Installation GP Flor



After many meetings with the client, our team came up with the idea of a ‘marketplace’ – instantly we knew it was perfect. Traditionally, marketplaces are open, active and vibrant, with constant interaction and conversation.

Woojin Lee, Designer

Dedicated to hospitality

Interface's hospitality team is determined to turn heads and change perceptions

By Deepti Somasekharan



Interface launched its bespoke hospitality range across Asia and Australia in 2014. On the eve of an exciting new product launch, we take you behind the scenes to see how the hospitality team is working to redefine floor coverings in the sector – and how they are helping interior designers to create unique solutions for the region's most prestigious casinos and hoteliers.

In just two years the hospitality team has trebled in size and is now made up

of six highly creative, experienced and passionate individuals; all devoted to supporting a rapidly growing base of customers. The team has bases in two of APAC's most cosmopolitan and vibrant cities, Sydney and Singapore, and is supported by local manufacturing plants in Australia and Thailand, which are fully equipped with custom design centres.

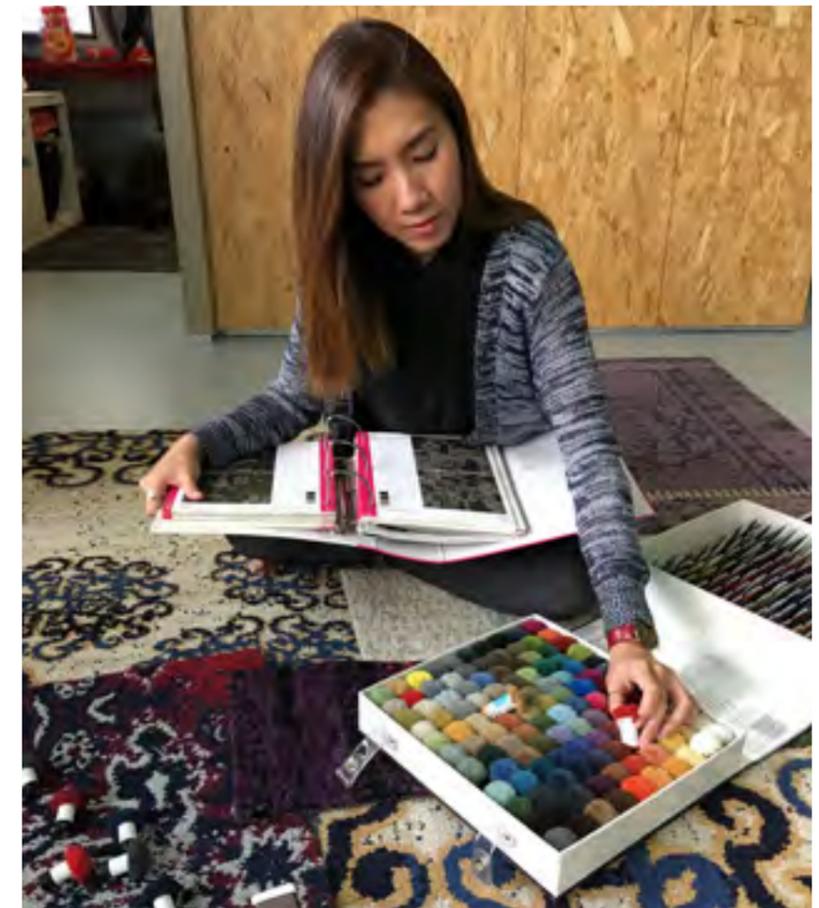
The dynamic partnership between Ivan Sunde in Sydney, and Florence Sam in Singapore is the driving force



behind the two local teams. Ivan joined Interface seven years ago and is a firm believer in developing and nurturing sustainable and socially responsible business models. Ivan is clear about his motivations: "I am passionate about everything we do, sustainability and great customer service are at the core of everything for me. I have found my niche in the hospitality sector – great design, inspiring spaces and inspiring people."

Working alongside Ivan is Heather Washington, who joined Interface in 2015, bringing with her over 15 years of design experience. Heather had just returned from a very successful Australian Hospitality & Gaming Expo in Brisbane when we spoke with her: "I'm seeing a real change in the way designers are beginning to use our system of squares and planks. At first many are sceptical, I guess even nervous, because what we offer is so different to traditional broadloom. But once they have had a chance to play with the product they really get it."

The old paradigm of 'hotel equals broadloom' is something Florence Sam is no stranger to having spent close to three decades supporting hotel designers. After joining Interface



Esley Loo selecting colours for a custom carpet design

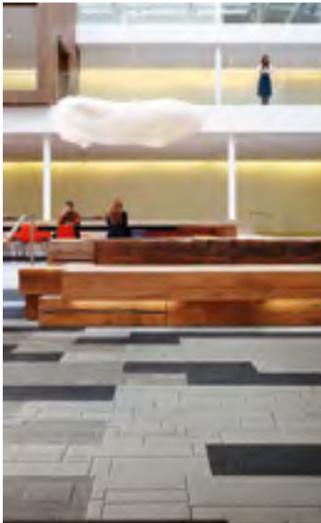
Interface Hospitality Team



Ivan Sunde



Florence Sam



< in 2013, she is enjoying the opportunity to change the established way of thinking: "The designs and effects achievable with our carpet tiles are more exciting than anything else in the market and what we offer on top of that is a level of flexibility and functionality that is simply not possible with broadloom."

Also based in Singapore, Theresa Zhou has been working in hospitality for a year and a half. A convert from the commercial sector, Theresa thrives on the diversity of design challenges now coming her way. "Our customers have such a broad set of needs. For example, whilst some of the big chains want a high level of consistency in their guest rooms, smaller boutiques want every room to be different. I love challenges like that."

Two exceptional designers complete the team: Esley Loo based in Singapore,

and Danielle Rizk in Australia. Having previously designed for a company making handmade rugs, Esley joined the team in 2014 and now relishes every aspect of floor design, from simplistic recolouration and pattern enhancement through to full custom designs. Her enthusiasm for creativity is clear when she adds, "The tapestry technology I have at my fingertips now is phenomenal – it gives me so much flexibility."

In her fourth year with Interface, Danielle previously worked in interior design and architecture practices servicing the commercial, retail and residential sectors. Based in our Sydney Office, Danielle's passions are interiors, luxurious textiles, couture fashion and striking graphics. When asked what she enjoys most about her work, she said, "I love being able to ensure that what we



do works with all the different mediums now available to our customers."

The team is proud to bring you Interface's latest hospitality release: The Portmanteau™ Collection. Six patterns of a shamefully luscious construction are the focal point of the range. To help carry the theme throughout an entire hotel we have created two companions for each of the six patterns – incrementally diffusing the texture so that transitions can move slowly across the floor or end abruptly for dynamic effect. To complete this indulgent collection, we created a texture like a loosely woven textile that beautifully offsets the graphic quality of the other patterns. Every bit of it is sink-your-toes-in deep.

interfacedesignspace.com

At **interfacedesignspace.com** you'll find an eclectic mix of interior design stories: from features documenting interior concepts to insights on the latest colour trends. A digital initiative by Interface, this platform aims to inspire architects, designers, artists, or anyone interested in the art of the built environment. Looking for ideas on how to make a space more collaborative or inspiration for your designs? Take an in-depth look at some of the nature-inspired projects the Interface team has helped bring to life.

Here are our top picks from the blog to get you started: search for the article titles on **interfacedesignspace.com** and read on!

Can flooring be interactive?

With a brief to introduce the most innovative and interactive features ever seen in Korea, the Lotte World Mall development by Benoy Architecture, in collaboration with Interface, has crafted the world's first interactive flooring. >>

Can designers create connections between people and spaces?

The identity of an organisation isn't always consistent with the people working within it. How can designers inject some life and 'human-ness' into commercial spaces? >>

A mindful space for beautiful thinking

This hot, young design team from Woods Bagot has created a space that marries creativity, whimsy and tranquillity: "Our workspace doesn't have to be the boring old office space, it can be an environment that is really, really beautiful." >>

What is the role of floors in wayfinding?

With the success of their recent architectural and interior project – the University of Wollongong Science Teaching Facility – Interior Designer Rene Deoberitz from Graham Bell Bowman (GBB), reflects on the science of wayfinding, and the importance of flooring within the space. >>

Commercial spaces that think beautifully

The team at Geyer Melbourne designs for people, not spaces. In their recent completion of the 150 Collins Street project for Westpac Melbourne HQ, designer Iva Durakovic reveals how they champion beautiful thinking, and why Interface was the perfect solution. >>

Eye of the storm

For the second collaboration in Interface's 'Beautiful Thinking' campaign, designers from PMDL find focus and tranquility among density and clutter. >>





CASE STUDY

The subtleties of nature

Using biophilic themes gracefully in the Jingdong organisation's vast new headquarters

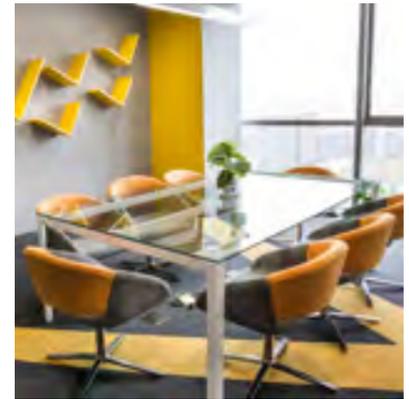
By Jamie O'Brien

The Jingdong organisation, known as JD.com or Jingdong Mall, operates one of the largest e-commerce platforms in China. Comparable to Amazon in the West, they have recently settled into their impressive new headquarters on the south east side of Beijing. The Interface Beijing team was responsible for the 114,000m² refit, working with three local interior design firms – Interface's largest project to date in China. Jingdong's

management chose to work with Interface because of our service reputation and our commitment to sustainability. Although on first look the interiors don't seem to be heavily influenced by biophilic design, on closer inspection, we can see a subtle natural theme has been used to accent, rather than dominate the building. However, when visitors get the chance to explore deeper into the huge complex forest-

inspired interiors complete with treehouses are revealed. Interiors draw on the natural environment with foliage-inspired wall and floor coverings, vertical wall planters and grass-like rugs – while many of the 40 different interior styles use natural earth tones. Large windows and natural light are prominent, including triple height open plan workspaces with floor-to-ceiling windows.

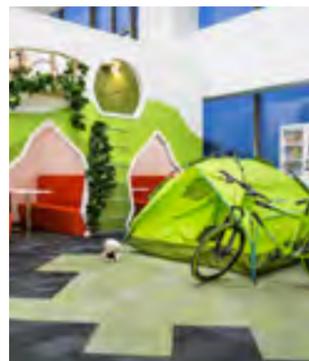
Variation and movement are created with naturally textured floor coverings, and transparent dividers are used to create semi-open collaboration spaces. Entropy™ carpet tiles, used in meeting rooms and to create green rug areas, were the first Interface products to incorporate principles of biomimicry in their design. The tiles have varied textures and hues allowing them to

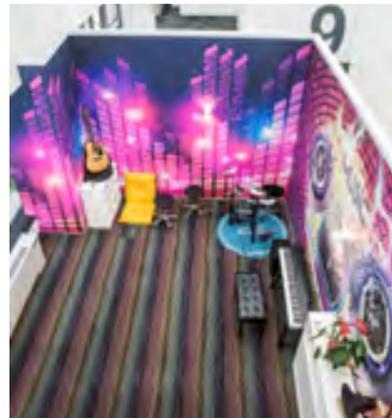


Product Entropy™, Vermont™, Board Games™ Collection, Viva Colores™, Colour Me™, Cartera™ Collection, Chenille™, Flow™, Oblique™

Design ADI, WTL Design & Solutions, JHE

Installation Modular Space





< be installed randomly – and in any direction – to create a natural looking surface. The effect is similar to fallen leaves on a forest floor: no two leaves are the same, but they form a consistent, holistic covering. This means that if old tiles need to be replaced in high-wear locations, new tiles never look out of place.

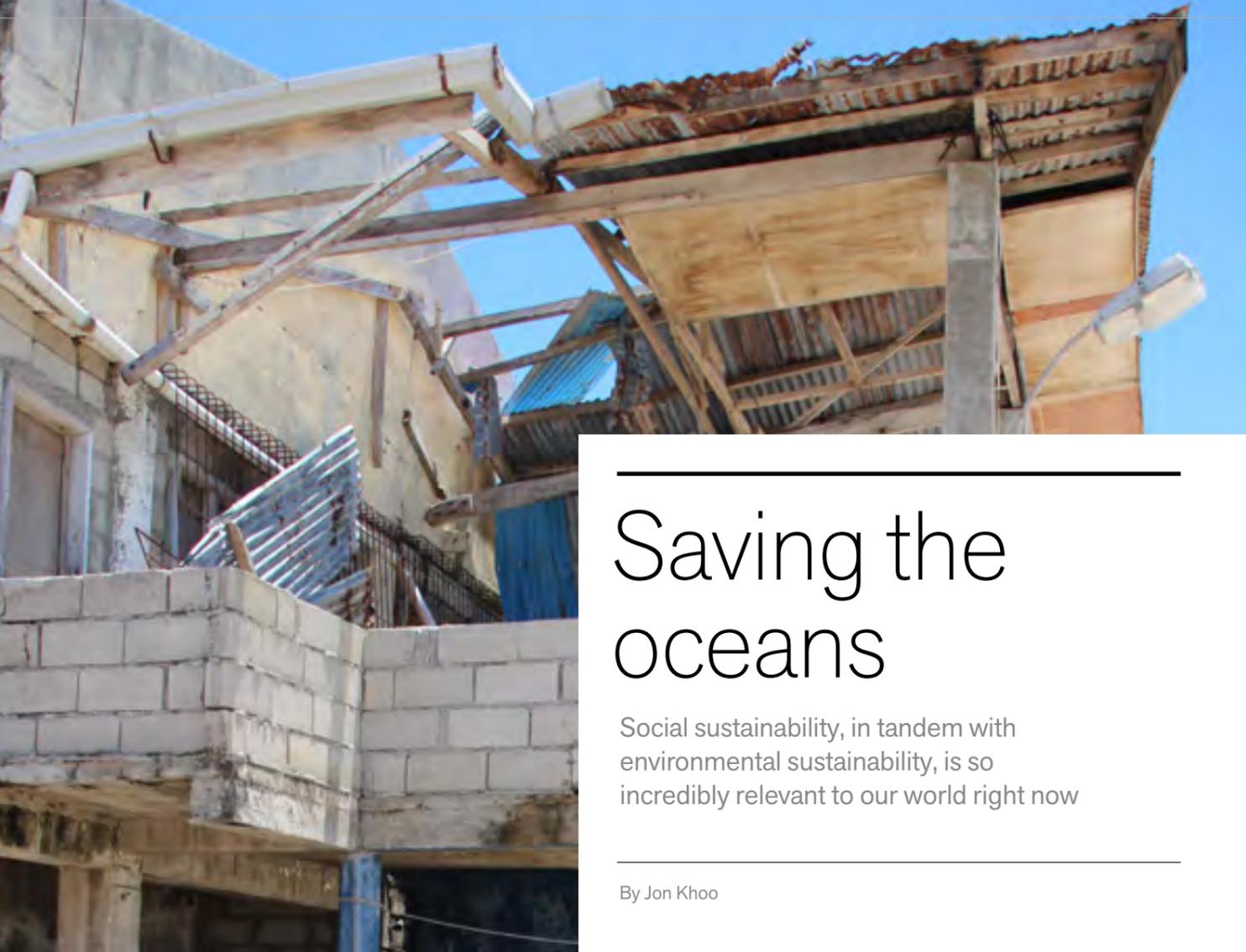
The Cartera™ Collection is inspired by bright hand-woven baskets made by the native artisans of South America. The collection includes vibrant leafy patterns that use the natural woven design to add texture, movement and vibrancy to staff breakout areas.

The main challenge for the Interface team was the

immense scale of the project, both in terms of space and the number of different interior styles required. Our designers created 40 different patterns and colour combinations, using carpet tiles throughout the facility in office space, meeting rooms, lounge bars, gyms and staff life-spaces.

Jingdong's headquarters are a good example of how natural elements can be incorporated into any office. Biophilic design isn't for the exclusive use of plush hotels, luxury apartments or big-budget public spaces. It's also about making subtle decisions that can make a huge difference to the daily lives of office workers, students or even hospital patients.





Saving the oceans

Social sustainability, in tandem with environmental sustainability, is so incredibly relevant to our world right now

By Jon Khoo



Visit net-works.com for exciting news regarding the expansion of Net-Works™

In 2015, the United Nations included the conservation and sustainable use of the oceans on its list of 17 Sustainable Development Goals. The UN estimates that over three billion people depend on marine and coastal biodiversity for their livelihoods and that as much as 40% of the world's oceans are heavily affected by human activities, including pollution, waste, depleted fisheries, and loss of coastal habitats.

Marine plastics remain a key global challenge, with recent research estimating that 8 million tons of plastics are dumped in our oceans each year. In fact, a report being published at this year's World Economic Forum in Davos predicted a scenario where by 2050, without intervention, there would be more waste plastic in the sea than fish.

Since 2012, Interface has partnered with leading conservation charity the Zoological Society of London (ZSL) on Net-Works™, our community-based supply chain for discarded nylon fishing nets. Net-Works is an inclusive business solution that intertwines both social and environmental sustainability – helping protect delicate marine ecosystems while also offering access to finance for some of the poorest communities in the world.

Through Net-Works, local fishing communities sell their waste nets into Interface's global supply chain – offering them new socio-economic opportunities

while also creating a long-term platform for ZSL to engage with and work alongside communities to protect their natural environment.

In turn, the nets are regenerated into ECONYL® nylon yarn by Interface's supplier Aquafil, which provides a new and restorative source of recycled materials for use in Interface's carpet tiles.

In 2015, Net-Works expanded its operations into the northern Iloilo region of the Philippines and set up in its first collection sites in the Lake Ossa region of Cameroon. To date we have collected over 80,387 kg of waste nylon nets.

As Net-Works has developed, we've seen the development of confidence in the community bank model. Several community banks are reporting an increase in the amount members are choosing to save.

For nearly all our community bank members it is the first time that they have local and regular access to financial services. Christina, one of the community bank members in the Philippines, explains: "before [Net-Works] I didn't really do savings, I used more of a piggy bank model." She was saving, but earning no interest. Now she has a different approach to her personal finances: "My income, minus my savings, is what I'm able to spend, and I'm pushing myself to save. This is my money and it'll sit and grow..."

Beyond the people who now have access to the bank, there's been a ripple effect – we've been able to improve the coastal environment for over 50,000 people in the communities in which we work.

Interface and ZSL will continue to develop the funding and infrastructure to expand Net-Works, starting with the announcement of a third country in 2016. In addition, we will create a model for inclusive business that is scalable and replicable, providing tools that will create a framework for implementing Net-Works in new regions and empowering new communities.

Net-Works has taken Interface a step closer to our goal of closed-loop manufacturing, while also improving the living standards of thousands of people. It is a real-life example of how making a positive social impact can, and should, go hand-in-hand with economic success.





After talking with the client, we worked on providing them with an environment that would be first and foremost a hard-working long-lasting design, one that was suitably flexible and adaptable

Darren Iloste,
Project Lead



CASE STUDY

An eye for design

Crédit Agricole Corporate and Investment Bank's new office design in Hong Kong is testament to the design prowess of interior designers, Yeo Studio

By Jamie O'Brien

The building, Two Pacific Place in the finance district, has an eye shaped plan, which means most interior spaces are curved. Project lead Darren Iloste explains the novel solution: "Rather than try to follow the building's geometry we decided to give the floor its own distinct pattern that could be understood separately. Carpet tiles laid in a herringbone pattern allowed the carpet to flow effortlessly through the various spaces with its own logic."

The objective was to redesign and reorganise the clients existing space, implementing a more open workspace. The client wanted to introduce more light and openness to their environment, and create welcoming

collaborative areas, whilst still providing the privacy and individual working points required for their line of work. As the office had not been renovated for a number of years, this process also served to bring a cohesive design across the four floors, optimise the use of space and create multiple use areas.

Darren added, "After talking with the client, we worked on providing them with an environment that would be first and foremost a hard-working long-lasting design, one that was suitably flexible and adaptable. Design flourishes were to be kept to a minimum, focusing more on providing quality materials and finishes that would last."

A base palette of white and grey with timber accents was chosen to provide a framework for this strategy. By keeping walls and furniture white and light, the carpet became a real focal point for the space, highlighting the visual texture of the herringbone design.

The pattern was created using the Human Nature™ Collection – the adaptable Skinny Planks™ tiles making it easier to install the herringbone pattern. A selection of complimentary stone grey hues were chosen in Flint, Nickel, Slate and Granite and arranged randomly to mimic the variations of natural stone flooring.

The client insisted on sustainable choices for their new office, so Interface's products were a natural choice for Darren: "As flooring is one of the largest materials of our selection it was integral that we selected a responsible supplier. The Human Nature series has such a great green story it helped us established a base for other selections."



Product Human Nature™
Collection

Design Yeo Studio

Installation Modular Space



Dr Nirmal Kishnani
Vice Dean, School of Design
and Environment, National
University of Singapore

Dr Nirmal Kishnani is the force behind several platforms on sustainable design in Asia. FuturArc magazine, where he is editor-in-chief, is a bimonthly glimpse of green in action. FuturArc Prize and Green Leadership Award, two competitions that he chairs, probe the future of design.

Nirmal's early interest in the occupant-building interface led to a preoccupation with the influence of architecture on human well-being. In 2002 he founded Asia's first green consulting unit where a biophilic approach was taken in projects such as the retrofit of the Asian Development Bank (Manila), Khoo Teck Puat Hospital (Singapore) and Gardens by the Bay (Singapore).

His book, Greening Asia, eschews checklists and instead asks what might be a vocabulary for sustainable design. Dr Kishnani has sat on advisory panels in China, Singapore and Vietnam, targeting policy and design guidelines. In 2015 he featured as one of the '50 most influential in Singapore design' in Singapore Tatler Homes magazine.

Are green buildings in Asia biophilic?

Why the answer matters, particularly for our region

By Nirmal Kishnani

'Green' in Asia is dominated by certification tools. There are now some 14 national variants – each not unlike LEED in the US – and each offers tiered ratings at the building scale (with some at the urban scale). The rating is determined by an aggregated score that is the result of compliance with requirements that focus on measurable outcomes such as energy and water efficiency.

'Biophilic design' has a more qualitative goal, specifically human well-being tied to the presence of natural elements in buildings, such as greenery and water, or access to attributes and qualities found in nature. This can be hard to measure but is often highly visible, as it affects architectural form and appearance.

It should be said that green certification also recognises the importance of well-being, but the focus here is on physiological well-being by avoiding damage to the environment. The design team is told, in effect, 'what not to do' in the interest of occupant health and comfort. Biophilic design targets psychological well-being on the grounds that everyone has an innate affinity for nature. The approach here can be thought of as 'what to do' to improve well-being.

What do building users think matters more?

Some 2,000 occupants of 11 office buildings in Singapore – a mix of green certified and non-certified developments – were surveyed on their perceptions and expectations of green buildings. Asked if they thought they were in >



Image by Hiroyuki Oki

Related Articles



The Biophilic Effect
Page 6-9

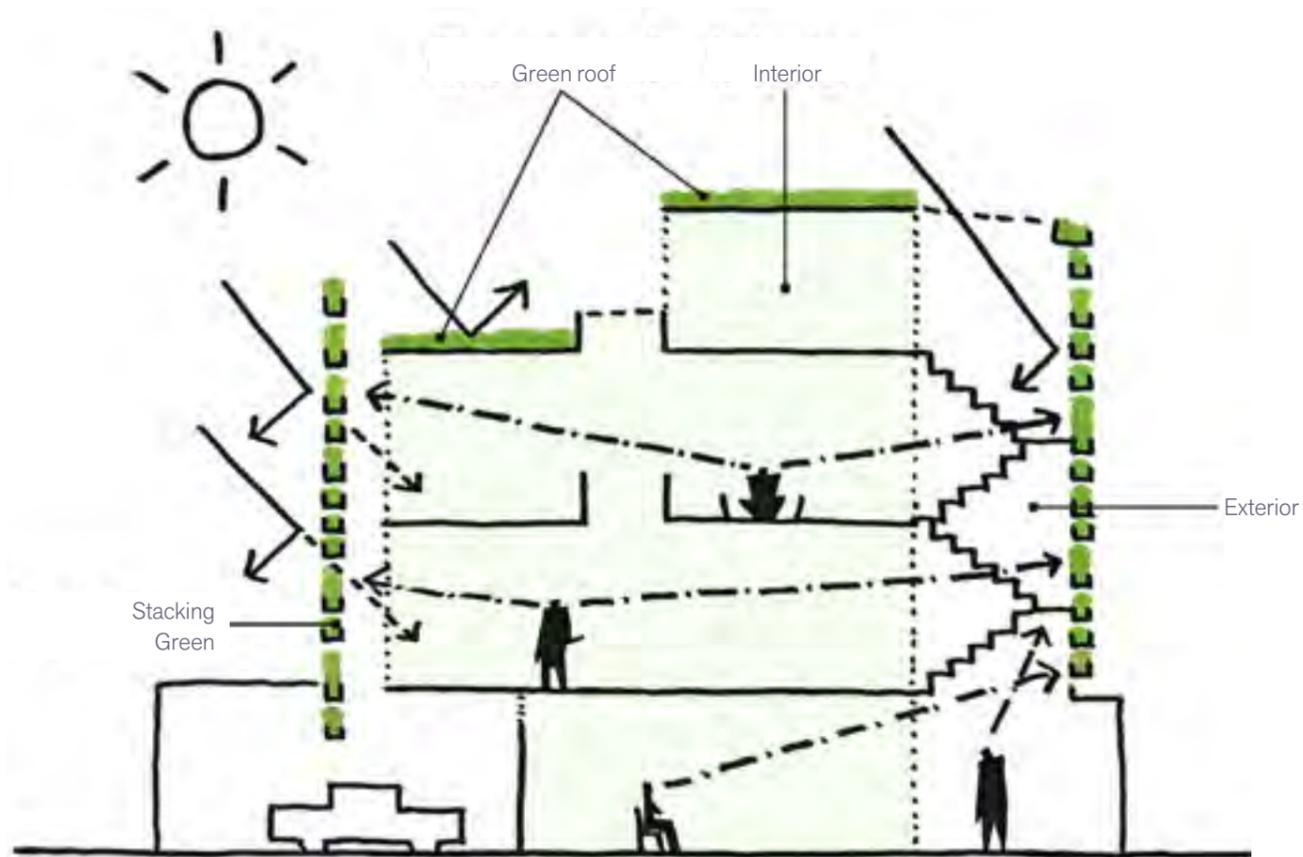


Four Analogues of Biophilic Design
Page 10-17



Biophilic Design Asia
Page 20-25

Biophilic design in action: greenery, daylight, air flow and views are utilised in this award-winning tube-house in Ho Chi Minh City, Vietnam; the building successfully addresses well-being at the building and neighbourhood scales without green certification – architect Vo Trong Nghia.



Drawing by Vo Trong Nghia

Stacking Green: Illuminated greenery can be seen from every room in the house.

< a green building, a sizeable number in non-certified buildings, almost 14%, said yes, suggesting a baseline expectation of green that isn't linked to certification.

Asked what attributes they thought characterised a green building, the group as a whole – including those in certified buildings – mentioned plants (21.5% of responses) and daylight (19.6%). Energy and water efficiency, sensors, controls and recycling – the focus of many certification tools – filled the subsequent four spots. Certification itself, as a marker of what is a green building, was mentioned by only 2.4%, a surprisingly low figure given that almost a third of all buildings in Singapore are presently certified.

When the same group was asked to pick features or attributes that reduce stress, six of the top ten turned out to be biophilic in nature: presence of plants (58.5%), views out (57%), access to daylight (44.2%), water features (43.9%), courtyard spaces (35.2%)

and sounds of nature (35.2%). Only three correspond with certification requirements: noise control (65.4%), air quality (61.3%) and temperature controls (51.2%).

User response is unequivocally biophilic, but how much corresponding emphasis is there in certification tools?

Fourteen Asian green certification tools were reviewed. All tools seem to say greenery and water are important, but almost none link these to the question of occupant well-being. Of the two, greenery is sometimes parked under 'ecology' where it is tied to natural systems (for instance, the need to preserve existing habitats within project site). Enhancement of green cover is mentioned by some, but this is often linked with goals like 'reduced urban heat island effect'. The potential of water – salutogenic or ecological – is ignored. The tools are interested in conserving water, and little else.

The review then looked at certain biophilic attributes, namely access to daylight, natural ventilation, and view to outdoors. The most valued of these are daylight (9 out of 14 tools ask for this) and natural ventilation (8 out of 14). The clauses here often carry a caveat on comfort, worded as the avoidance of visual or thermal discomfort. Tellingly, the clause itself can be parked under 'Energy', not 'Indoor Environmental Quality'. The least valued is view to outdoors; 10 out of 14 tools do not mention this or ask for it in only for some building types.

The most biophilic tool in Asia is Lotus (Vietnam) in which some 18% of achievable credits are linked to natural systems or biophilic features. The least biophilic tools, accounting for about 5% or less of possible score, are GRIHA (India), LEED India (India), TREES (Thailand) and GreenSL (Sri Lanka). To put this in perspective, the WELL Building Standard – a new certification >



Image by Hiroyuki Oki



These shocking images show the reduction of Jakarta's vegetation and waterways due to urban spread, industrial development and pollution

Illustration by students of the MSc ISD programme, National University of Singapore; based on Nasa Earth Observatory data.



Image by Giovanni Cossue

< tool dedicated solely to occupant well-being – assigns 33% of achievable credits to natural systems and biophilic features.

On the whole, it appears, Asian certification tools are not deeply biophilic. Biophilic principles are undervalued, either missing or (mis) placed in a category other than well-being. And because these tools drive the definition of green, it follows that the green building certification schemes in Asia do not actively seek biophilic design as a pathway to well-being.

This said, there are notable exceptions. Green Mark version 5 (non-residential), currently in pilot stage, has changed the vocabulary of certification. In a clause on greenery, the team is called on to 'integrate a verdant landscape and waterscape that is accessible for all to enjoy... to enhance the biodiversity around the development and provide visual relief to building occupants and neighbours.' In another clause on 'Well-Being', biophilic design is explicitly discussed as provision of 'elements of nature... to nurture the human-nature relationship... for the health and

happiness of the building users.' Version 5, compared with the current version, almost doubles the emphasis on natural systems and biophilic features, accounting for over 20% of possible score, making Green Mark the most biophilic tool in Asia. It will be interesting to see how version 5 changes the look and feel of future green buildings in Singapore. Other tools, like GRIHA in newer versions, are also increasing the weight placed on biophilic concepts, although they still lag behind in the final tally.

Exceptions aside, the general lack of interest in biophilic design is a missed opportunity in Asia because occupant well-being – in many cities – is compromised for the majority of residents. Many cities have been systematically stripped of blue-green cover; once accessible green spaces and waterways are replaced by grey infrastructure and gated communities.

Case in point: the city of Jakarta (Indonesia), since its early days as a metropolis, has seen a loss of green space – from 24% to 9.9% of city area – with a parallel loss of its water footprint from 4% to 2.5%. Green space available to the poor is now estimated at 0.19 m²/person; the affluent have 6.53. In the same period, urban density rose from 10,075 to 13,157 people/ km², with peak density now close to 50,000.

In a recent study, Enhancing Blue-Green and Social Performance in Dense Urban Environments: Biophilic Design, it was reported that this transformation has negatively impacted the quality of life in the city. Jakarta was once a water city; rooted in culture and religion, water was positively perceived. Developments in recent decades have altered this, creating new anxieties and phobias for water. Factories, buildings and roads have turned rivers to narrow concrete, polluted canals; access to rivers and green spaces has been curtailed. This, in turn, has triggered a change in habits: a new generation of Jakartans pollute rivers with garbage and sewage. Waterways have lost their social value, becoming an open dump.

In cities like Jakarta there are no real alternatives to better policy and planning.

Until that happens, buildings can do much to compensate. Biophilic design ought to be the centrepiece of design guidelines in Indonesia. Greenship, Indonesia's green certification tool, however, offers just 7% of available credits to these concepts.

With these tools, there is another problem. Elements and strategies that affect well-being are often categorised under something other than well-being. This misframing matters. Greenery to reduce urban heat island is a positive step, but it carries no obligation for occupant access or enjoyment. As a result, many green roofs are unseen or unreachable.

The Singapore survey of office buildings suggests that being green, at least in the mind of users, is biophilic. It stands to reason that making green certification tools adopt biophilic design principles could increase public interest in certified projects. Developers complain that they'd like to 'go green' but there is too little consumer buy-in. Well, there is now a way to change that.

The review of Asian certification tools was carried out in collaboration with Shuchi Jhalani, a post-graduate student at the School of Design and Environment, National University of Singapore.



Image by Giovanni Cossue

CASE STUDY

Investing in nature

Standard Chartered Bank takes the well-being of its workforce very seriously

By Jamie O'Brien



Paul Isted is Head of Project Design & Solutions, part of the bank's global property function, and is responsible for all office and retail workplace solutions across the bank's 70 markets worldwide. Paul put together the master plan for Standard Chartered's ongoing Singapore relocation strategy to move the majority of its workforce from its head office in Singapore's Central Business District to the Changi Business Park Campus. The driving factors behind the move are to reduce real estate costs and create a modern, flexible workplace.

The campus-inspired design has created 'destinations' across the entire facility – rather than the usual setup of duplicate facilities within each building. Paul explains the theory: "The Singapore Campus Master Plan was developed from extensive research and by listening to

the needs and requests of our workforce.

Our employees wanted a more vibrant workplace, with a wider choice of work settings, collaborative areas and recreation spaces. There was also a need to address employee health by providing more comfortable, ergonomic workspaces, an on-site gym, and a wellness centre including a doctor's clinic."

The biggest challenge for Paul was to meet the changing business needs and evolving work culture of the bank. This gave rise to the 'Activity Based Working' concept – which aims to provide flexible workspaces such as a variety of ergonomic work settings and semi-enclosed areas for ad-hoc meetings.

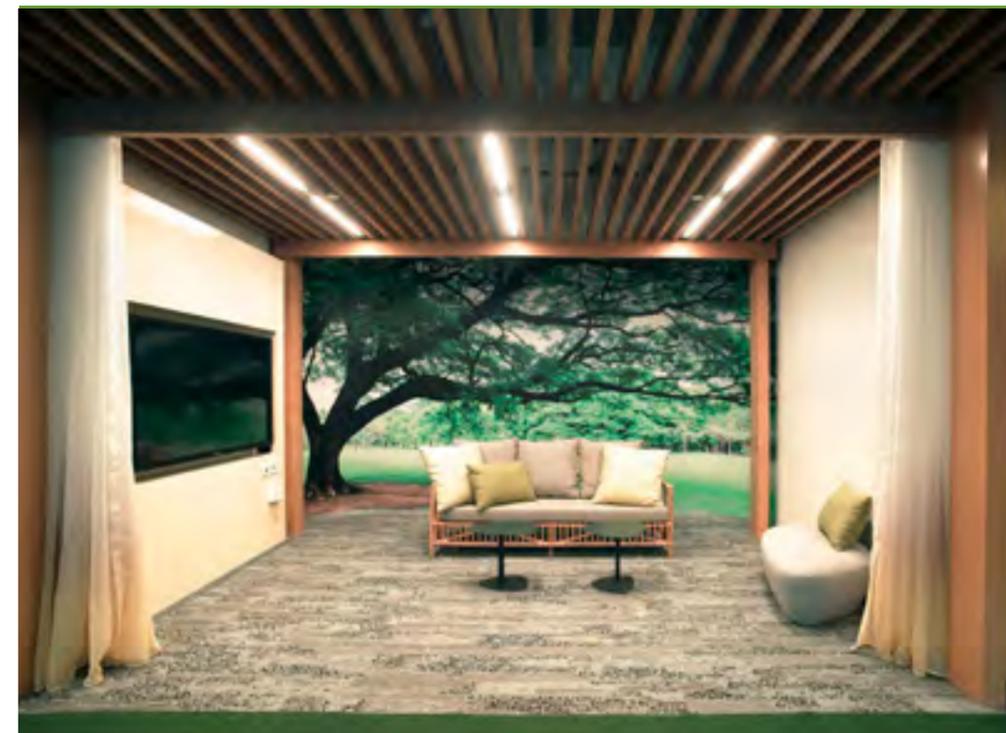
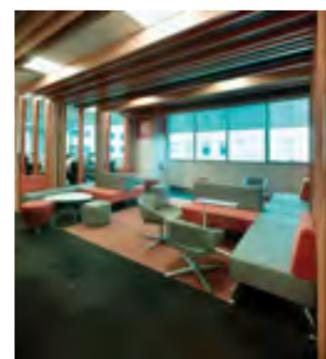
Standard Chartered had existing office space in Changi Business Park, and the plan was to create a Social Hub and a Meeting Hub within >



Product Urban Retreat™ Collection, Human Nature™ Collection, Level Six™, Asia Paint Box™

Design In-house from Standard Chartered Bank and Aedas

Installation Contrac Image



< new offices in the complex. The Meeting Hub includes a range of spaces with fully integrated technology; for example, semi-open meeting pods have fully integrated flat screens for reviewing presentations, and conference rooms are equipped with video conferencing equipment to connect with the bank's other locations.

The Social Hub incorporates space to relax and recuperate as well as a fully equipped gym. Each of its four floors has a distinct theme: Entertainment, Rest & Relax, Sports & Recreation, and Park. The park-themed floor draws heavily on biophilic design, with natural features such as unfinished wood, and feature walls showing life-size park scenes. These are complimented with outdoor-style seating

and Interface's Human Nature™ and Urban Retreat™ carpet tile collections – made with up to 85% recycled material.

The Human Nature Collection's narrow 25cm x 1 m tiles – our revolutionary Skinny Planks™ – are used to construct pebble-like floor areas. Its range of similar earth-tone hues allows designers to mix and match to create natural looking landscapes, mimicking the transition from one topography to another. Urban Retreat is a modular tile that is used to create soft edged lawn-like vibrant green rug areas – and as it requires no cutting, installation is low on waste.

Away from the Social Hub the workspaces follow a more business-like design. Each floor has a different accented colour scheme

of orange, blue and green, with each colour scheme representing the bank's regional brand themes of the Middle East, Africa and Asia. Here, the influence of nature is more subtle, using a brown colour option from the Level Six™ carpet range, with custom accents to match each floor.

Paul added, "We have shifted the focus away from sedentary desk arrangements for more agile and active ways of working. This has given our employees multiple work settings, an array of collaborative spaces as well as focus and quiet areas. Our intention was to help employees work more effectively, and to attract and retain talent by increasing work performance and job satisfaction. We're already seeing the benefits."



CASE STUDY

The rainbow connection

Willis Towers Watson creates a colourful world for their employees

By Shaun Jansen

When leading global advisory, broking and solutions company Willis Towers Watson envisioned their new office in Mumbai, India, they pictured a huge, vibrant open-plan interior that inspires creativity and productivity. Walk into their new office today, and you'll be greeted with a myriad of colours and motifs inspired by India's multi-lingual and multi-cultural heritage.

Director of Infrastructure Services, Real Estate and Workplace Solutions Mahendra Bangalore explains that the design aims to create an office landscape that utilises organic geometry rather than a conventional grid, breaking away from the walled confines

of cubicles and meeting spaces. This was done to encourage people to get together and collaborate beyond the confines of meeting rooms. Lines of hierarchy blur as workspaces merge into one another, while the multiple functions of workstations, private offices and group areas offer a variety of interesting workspaces.

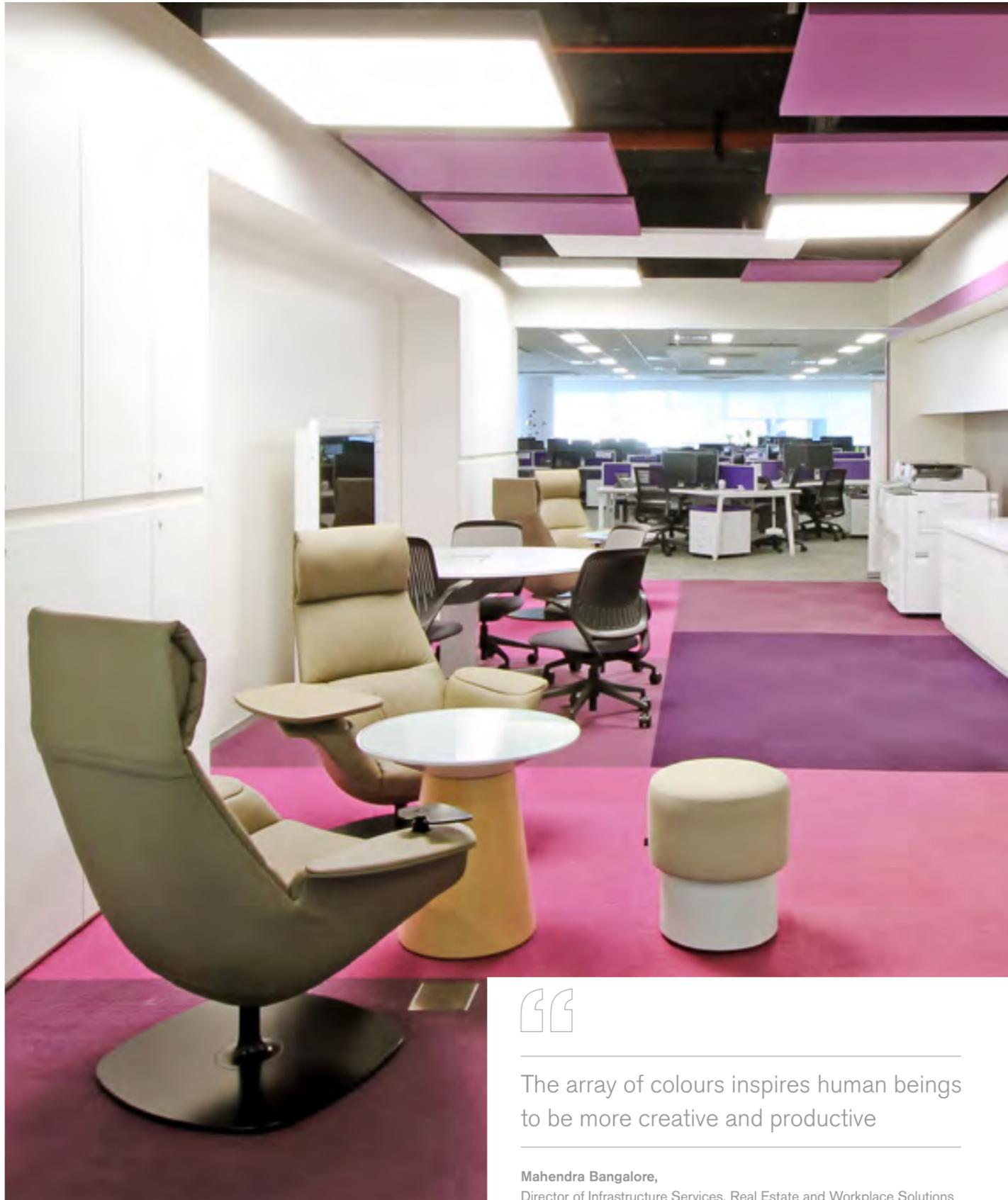
Based on the brief, design firm M Moser recommended 'neighbourhood planning', which includes both closed and open workspaces. Self-contained 'pods' contrast with 'landmark' congregation spaces to give the large floor area variety and intrigue. Each of the seven 'neighbourhoods' was assigned >



Product Urban Retreat™ Collection, Viva Colores™

Design M Moser and In-house from Willis Towers Watson

Installation FIT Solution



< a different colour to help with wayfinding in the large homogeneous interior. The colours used were taken from the colours of the rainbow: violet, indigo, blue, green, yellow, orange and red – popularly known as VIBGYOR.

The design concept for this project required a wide selection of hues, so when it came to flooring, Interface's solid colour collection, Viva Colores™ was chosen for its ability to do just that. With more than 60 colours to choose from, Viva Colores provided the necessary options to fit out the various office sections. While the high-energy areas have a vivid theme, the work desk areas

were given a more subtle approach. Neutral earth tone colours were picked from the Urban Retreat™ collection, providing a gentle contrast between vivid colour and monochrome.

On top of good design, Mahendra also appreciates the efficient working relationship Willis Towers Watson has with Interface around the world. This enabled them to maintain the global design specifications set by their head office in London. Mahendra goes on to say, "It was a really good experience working with Interface – their design and delivery timelines exceeded our expectations!"



The array of colours inspires human beings to be more creative and productive

Mahendra Bangalore,
Director of Infrastructure Services, Real Estate and Workplace Solutions



Sustaining an ancient art form

Jill Wan talks about the inspiration behind Interface China's Eco Hero™ carpet tile range: Natural History™

By Shaun Jansen

Could you share with us the inspiration behind the Natural History Collection? ?

The 'Eco Hero' concept marries Interface's design capabilities with our ability to make the most sustainable product we can – in China, for China. By doing this, we aim to truly connect with customers and help drive change.

The patterns of Natural History, our first Eco Hero product, draw from the landscapes seen in traditional Chinese brush paintings. The product aspires to give an escape into a rugged yet beautiful landscape, evoking the imagination of a quieter time in China, when the air was cleaner and the environment was more natural.

What are the sustainability features and benefits of this product collection?

We attempted to package all our sustainability features into one product and the result was Natural History.

We maximised the use of recycled materials, it contains close to zero 'volatile organic compounds', it can be cleaned without aggressive chemicals, and it contains no 'material of concern'. At the end of its life, Interface commits to taking it back as raw materials for the production of new carpet tiles, right here in China.

On top of that, the already low carbon footprint of the product is reduced to zero with Cool Carpet™, a carbon offset program that we provide. Lastly, transparency is assured in all processes through an independently accredited Environmental Product Declaration, Greenguard Gold and Suite third-party tests.

What was the creative process like for this campaign?

I'm happy to have been given ownership on the creative concept of this campaign. After numerous brainstorming sessions the Chinese ink painting concept came out on top – and we think it will truly bring back an appreciation of this art form.

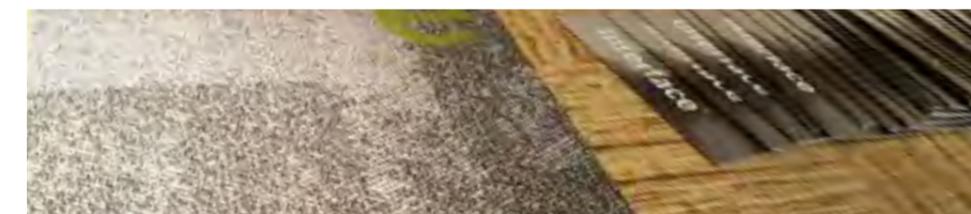
The most enjoyable part was creating the marketing material to tell the story. The imagery was very important; we focused on connecting the product visually to this rich piece of history. We also put the story into a promotional video, which helped make a strong impression on the audience



How can this product be applied to an interior in a design theme?

A variety of grey and beige earth tones make up the colourways for Natural History. The subtle colour gradations and patterns represent traditional calligraphic brush strokes.

The two patterns in the collection, NH610 and NH611, are easy to use, and can be applied to most spaces. Their simplicity can help create a minimalist artistic look.



What is Interface to you?

Interface is not just a carpet manufacturer; it has soul and a spirit that goes beyond the product itself, which can be seen in our inspirational designs and stories. I feel this enables people to think beautifully and make the world a better place.

At the time of print, Eco Hero - Natural History is only available in China.

CASE STUDY

From across the globe

Envi Con in Tullnau Carrée, Nuremberg, Germany

By Shaun Jansen



In 2013, Envi Con & Plant Engineering GmbH moved into the company's new premises in Tullnau Carrée building within Nuremberg's eastern city centre. To meet client requirements for increased collaboration, architectural firm Grabow + Hofmann created 'think boxes', 'communication islands' with advanced office technology and open-spaced areas.

Carpets from Interface's Urban Retreat™ collection and Flatweave™ product Precious Ground™ helped bring Envi Con's values of aesthetics, sustainability and co-efficiency to life. While the organic and transitional patterns of Urban Retreat gave the interior a biophilic design element, Cool Carpet™, an Interface service, was invested in to offset the entire life-cycle carbon footprint of the carpets used.



Images by Jörg Bakschas, Headroom Photography

Product Urban Retreat™ Collection, Precious Ground™

Design Grabow + Hofmann

Installation Fa. Böhmler

 Large and small squares, planks and skinny planks.



Dune in Dawn

A TIME TO REFLECT

Nature shows us how to enliven the spirit and awaken our senses from the ground up. It is the very root of creativity and well-being. Invite it inside and witness its power to positively influence human motivation and productivity. Introducing Dune one of 4 new Skinny Planks fresh for Spring 2016.

Interface® | A Foundation For Beautiful Thinking.

interfaceflor.asia/skinnyplanks

Lou Reed, millennials & icebergs

Transformational changes for today's generation

By Clark Harris

Next year I'll celebrate 20 years of a very happy marriage. The song my wife and I picked for the first dance at our wedding was Lou Reed's 'Perfect Day'. We wanted a song that expressed how special the day was for us and also spoke of the future we wanted to share. For those of you that don't know it, the final line of the song is: 'You're going to reap just what you sow'. Or in other words: you only get out of life what you put into it.

Selecting the right partner to share your dreams with is one of those big choices you make in life. Typically this happens around the same time that you begin asking yourself a series of existential questions that go something like this:

- Who am I?
- What am I doing here?
- Where am I going?
- What will I leave behind?

How we answer these questions and the subsequent actions we take are what define us as individuals. Perhaps now

more than ever before we recognise how the consequences of our choices directly impact the generations that follow us.

I'm an optimist, I believe that we all want to leave the world in a better state than we found it. It's certainly a common bond I share with my fellow Interfacers, and I think it's why most designers get out of bed every morning. Unsurprisingly, a survey by IIDA in *Interior Design* magazine revealed that 44% of interior designers rank 'the opportunity to do great design' as a top factor influencing their job satisfaction.

So what is 'great interior design'?

For me it goes way beyond the aesthetic. It starts with a vision of the impact you want your design to have on the people living, working, healing, learning or playing in the spaces you create.

Your vision becomes a physical reality as a result of the materials you select for your composition – and this is where your choices matter most. The folks we're >



Happy Marriage – Me & Sarah



Mission Zero: Our promise to eliminate the negative impact our company may have on the environment by the year 2020.



I'm an optimist I believe that all of us want to leave the world in a better state than we found it. It's certainly a common bond I share with my fellow Interfacers...

Clark Harris
Head of Marketing
Asia & India, Interface

< designing for today are better educated, certainly better connected, and without doubt more interested in the origins of the food they eat, the clothes they wear, and what they sit and walk on.

A study by the Pew Research Centre in 2011 found that Millennials (those born after 1980, also called Generation Y) are more supportive of strict environmental laws, more likely to attribute global warming to human activity, and more likely to favour environmentally friendly policies such as green energy

and tax incentives for hybrid vehicles. Around 80% want to work for companies that care about their impact and many choose buses and bicycles ahead of cars – and tellingly, as an age group they are most likely to pay more for responsibly made products.

Millennials ask questions, they want to know what goes into the products they use, how those products are manufactured and what will happen to those products at the end of their useful life.

Like an iceberg, well over 80% of what constitutes

great design in today's context is probably not immediately visible to the end user, but it is there, right below the surface – and it matters. If you just ignore it and sail merrily on without thinking – really thinking – you risk of missing an essential element of truly great design.

Doing great design today is about having a positive impact on the inhabitants of the spaces you create and ensuring the materials and processes you use to construct those spaces do



not have a negative impact on the planet. If your clients are not already asking you about how the materials you use are made, then I'd hazard a guess they are not fully plugged into the emerging needs of their customers and employees.

Our late founder Ray Anderson listened to our customers – and it is what he heard and how he acted upon it that has propelled Interface to become one of the most sustainable manufacturers on the planet. Our commitment

to truly great design – holistic design – is what defines and galvanises Interface.

When we talk about a foundation for beautiful thinking we mean it both literally – our tiles are the visible foundation of the spaces you create – and metaphorically, as just like an iceberg there is awesome power below the surface. A force for change that has inspired us to adopt a radically different business model, a way of working in

which the health of our planet takes centre stage.

I started this article by saying you get out of relationships what you put into them. Selecting the right partner is one of those big choices you make in life.

Let's work together to ask the right questions; to make the right choices.

To make the world a better place.

Fibre to fibre, backing to backing



Recycling carpets for a better tomorrow

Eliminating our dependency on oil is a major part of achieving our goal of zero environmental footprint for Mission Zero®. Nylon, a major component in modern carpets, is derived from oil and is non-biodegradable.

That means we must reclaim and recycle as much as possible of our used carpet, and that of other qualified carpet manufacturers. By turning used carpets back into beautiful new ones, we can achieve two things: we dramatically reduce the amount of raw materials we take from the earth and we divert used carpet away from landfill sites. These two factors greatly reduce our negative impact on the environment.

From concept to creation to the end of its useful life, we feel responsible for each carpet tile we make. Our reclamation and recycling program initially provided material for our high recycled content backing, GlasBac®RE. Now, through collaboration with our recycling partners, carpet face fibre can be separated cleanly from the backing, allowing us to recycle fibre into fibre and backing into backing. At Interface, we recycle 100% of reclaimed carpet materials, so that when you ask us to reclaim your carpet nothing ends up in landfill.

Reclaiming and recycling as much used carpet as possible is core to our Mission Zero objectives. To date, we have reclaimed more than 118 million kilograms of carpet. However, with a global estimate of 2.2 billion kilograms thrown away each year, we are only saving a small percentage from landfill.

By being the first global carpet manufacturer to establish regional recycling partnerships in Asia, we are supporting our customers across the region to avoid landfilling their used carpet tiles, and therefore reducing our collective impact on the environment.

Visit interfaceflor.asia/reentry or contact your local Interface office to learn more about how to turn any used carpet into something good through our ReEntry recycling program.

The Process



Reclaimed carpet tile is collected regionally and sorted by fibre type at the recycling plant in China.



Face fibre and backing are cleanly separated using innovative technology.

Fibre Loop



The separated Type 6 and Type 6,6 Nylon is tested for their recycling suitability and sent to our fibre partners for melting into its original chip form, or to the engineering plastics industry for downcycling into new material.



Our fibre partners blend the Type 6 or Type 6,6 chip with virgin or post-industrial chips and other reclaimed materials, and extrude them into fibre containing post-consumer Type 6 or Type 6,6 Nylon.



New post-consumer recycled content Type 6 or Type 6,6 Nylon fibre is returned to Interface and tufted into carpet face.

Backing Loop



The backing of the carpet is processed into vinyl crumb.



The vinyl crumb is then blended to ensure consistency and turned into pellets.



Pellets are loaded into the Calendering machine and processed to form GlasBacRE sheets.

return this into something good



ReEntry™

Visit interfaceflor.asia/reentry to explore the possibilities.

mission



humanspaces.com

