Think Trespa

Experience

11 NEW DECORS

Introducing more Meteon® Naturals and Wood Decors.

Imagine

SOUTH AMERICA

New encounters in Trespa Design Centre Santiago.

Build

REFURBISHING EXTERIORS

Existing buildings can perform and look better by upgrading the exterior.

Trust

THERMAL BRIDGING

Learning ways to reduce heat loss occurring through external walls.

FOURSIDE

WOOD AND BEYOND

Façades That Tell a Story #02. 2013 | € 12,95

TRESPA®

TRESPA® METEON®
CONTAINS UP TO

70% WOOD-BASED FIBRES

Using Renewable Resources

TRESPA® METEON® PANELS CONTAIN UP TO 70% WOOD-BASED FIBRES, OF WHICH MOST ORIGINATE FROM SUSTAINABLE FORESTS. FSC™ AND PEFC™ CERTIFICATIONS ARE A CLEAR WAY FOR TRESPA TO SHOW ITS COMMITMENT TO FOREST CONSERVATION AND ITS SUPPORT OF BETTER FOREST MANAGEMENT. THE ENTIRE TRESPA® METEON® PRODUCT RANGE IS NOW AVAILABLE WITH PEFC™ OR FSC™ CERTIFICATION UPON REQUEST, IN RESTRICTED QUANTITIES.* FOR MORE INFORMATION ABOUT TRESPA'S SUSTAINABILITY POLICY VISIT **TRESPA.COM/SUSTAINABILITY**

***NOTE:** Trespa has PEFC™ and FSC™ certifications available upon request in certain jurisdictions. Certified material available from June 1st.



Think Trespa

TRESPA®

NATURE IS AT THE CORE OF IT ALL

We at Trespa have become increasingly aware of our impact on the environment. This issue aims to acknowledge our commitment to nature and show what steps we've taken towards being eco-conscious. We can't offer zero impact because that's not realistic in our industry. But what we can offer is a genuine, sincere approach to sustainable matters.

We have looked at the various labels, systems and programmes that focus on a responsible approach towards sustainability and have derived our own simple policy : 'Do No Harm, Do Good, Do Better ' – measuring the impact of our processes at every stage of the product's life cycle.

As a professional organisation, we like to make decisions based on facts – that's why we use established environmental analysis methods to measure our impact on nature. Working with sustainability consultants from PE INTERNATIONAL over the years (*page 17*), we have started to make meaningful changes to our methods – one of which is to set actions and priorities to reduce our environmental impact at the core of our company strategy. We further believe it is important to be transparent and genuine when it comes to the results of these environmental matters – we therefore publish our yearly position papers and Environmental Product Declarations to share our progress.

One initiative is to use raw materials from sustainable origin as much as possible. Our Trespa® Meteon® panels contain up to 70% wood-based fibres, most of which originate from sustainable forests. As a result, we are proud to announce that the entire Trespa® Meteon® range is now available with PEFC™ or FSC™ certification upon request.*

As we are part of a long value chain, we can't do this alone. We encourage our suppliers and invite our customers to join us in reducing our impact on nature. If we start in our own backyard, placing nature at the core of our decisions, and work together to better understand where we can improve, then we can really make a difference.

Keeping with the natural theme, we are introducing our new Matt finish (*page 22*), which offers a more organic, physical experience in terms of touch and look. In addition, we have increased our Trespa® Meteon® Naturals and Wood Decors to extend our portfolio of more natural-feeling products, all of which share the durability found in all Trespa products.

Aart Jan van der Meijden
Commercial Director,
Trespa International B.V.

***NOTE:** Trespa has PEFC™ and FSC™ certifications available upon request in certain jurisdictions. Certified material available from June 1st.

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A SOFT MATERIAL AND COLOUR PALETTE COMPLEMENTS THE OUTDOOR FEEL – WITH WOOD PANELS LINING THE ROOMS AND LOFT GREY TRESPA® PANELS DISTINGUISHING THE EXTERIOR. THE HOTEL CONTAINS RELAXATION FACILITIES SUCH AS A SAUNA AND WATER BATH, WHILE AN ON-SITE BEE YARD ADDS A TOUCH OF ECCENTRICITY. WITH A RANGE OF COMFORTING FEATURES, IT'S NO WONDER IT'S NAMED A HEALTH FARM.

NEW WOOD DECORS

NW20
BLEACHED PINE

ALSO AVAILABLE IN MATT FINISH

NEW WOOD DECORS

NW19
DARK MAHOGANY

Investor:
Ditrich Reiter
Sontowski & Partner GmbH

Architect:
Gerold Heugenheuser
WWA Wöhr Heugenhauser Architekten

Contractor:
Achim Reckziegel
Thiel Montage GmbH

TEXT SARA SEDDON KILBINGER **PHOTOGRAPHY** THEA VAN DEN HEUVEL

FOURSIDE
EYE-CATCHING, STRONG AND BALANCED

A RESIDENTIAL PROJECT IN GERMANY CREATES A STRONG DIALOGUE WITH NATURE – AESTHETICALLY AND TECHNICALLY.

"It's the entire picture: the product, the offered service and support, the colours, the quality, competence of the area managers and the technicians." *Achim Reckziegel*

TODAY, MORE THAN EVER BEFORE, WE CARE ABOUT NOT ONLY WHAT OUR HOME LOOKS LIKE ON THE INSIDE BUT ALSO ITS EXTERNAL AESTHETIC AND HOW IT PERFORMS ENVIRONMENTALLY. ARCHITECTS AND DEVELOPERS ARE STRIVING TO CREATE PROJECTS THAT MEET THESE CRITERIA WHILE BLENDING IN SEAMLESSLY WITH THEIR NATURAL SURROUNDINGS.

One project that ticks all these boxes – and more – is the Fourside residential project in Erlangen, Germany, dreamed up by WWA Wöhr Heugenhauser Architekten. The scheme comprises four geometric residential blocks with façades that are characterised by a concise horizontal layout. Window bands also alternate with sill bands at different distances, due to a range of windows of varying sizes and formats. In addition, the project boasts strong eco credentials: the compact design maximises thermal protection through a good area-to-volume ratio, high-quality glazing and effective thermal insulation of the external components.

HOW IT STARTED

In 2008, property group Sontowski & Partner launched a competition which attracted interest from 20 architectural firms, according to Gerold Heugenhauser, lead architect on the Fourside project at WWA in Munich. Initially, WWA came third in the competition but after it made its presentation to the investor in January 2009, it was awarded the contract. "He was interested in us because of other projects we had done in the past, as well as the fact that we have 25 architects in our firm, which was a good match for his construction timetable," Heugenhauser says.

"We wanted 'wood charisma'."

Gerold Heugenhauser

According to Ditrich Reiter, managing director of Sontowski & Partner, his firm's aim was to build something 'really special' with Fourside: "We wanted to create an environment where residents would immediately feel at home, even when surveying the apartments from the outside. We chose WWA because we loved the clean lines of their design," he says.

MORE LIKE FURNITURE THAN HOUSING

Heugenhauser and his team came up with a striking design comprising four buildings, housing a total of 36 apartments, which would be distinctive – but with a twist. "We wanted to create four buildings that look almost identical but aren't. For example, each building faces in a different direction [hence the name Fourside], which creates a nice aesthetic. We wanted to move away from something that looked like a typical building in favour of blocks that looked more like furniture than actual buildings," he explains.

Nor are the four buildings exactly the same inside. Each totals around 2000m² but apartments range from 60m² on the ground floor and up to 160m² on the top floor. Also, while the buildings are mostly three storeys high, some have a section that is four, as well as an additional component that is two.

THE NATURAL LOOK

It was WWA's desire to create a sustainable and natural-looking residential complex that led it to Trespa. Heugenhauser was already familiar with Trespa®'s Meteon® Wood Decors façade panels, which he had seen in a variety of other projects.

"We wanted to use 'wood-look' cladding on the outside and I had seen Trespa®'s Meteon® Wood Decors façade panels in other projects, although they tended to be very colourful. Here, we decided to use their NW15 Meteon® Wood Decors panels (Milano Sabbia) for a more natural look. ▸

Fourside, Germany

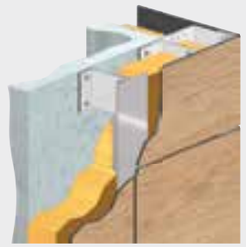
About the Project

INVESTOR
SONTOWSKI & PARTNER GMBH
ARCHITECT
WWA WÖHR HEUGENHAUSER ARCHITEKTEN
CONTRACTOR
THIEL MONTAGE GMBH
YEAR
2011
MARKET SEGMENT
FAÇADE - MULTI HOUSING/ APARTMENTS

PRODUCT
TRESPA® METEON® WOOD DECORS

FINISH
SATIN

FIXING SYSTEM
TS700 VISIBLE (EXPOSED) FIXING WITH RIVETS ON A METAL SUBFRAME



A mixture of concrete and Trespa® Meteon® Wood Decor panels animate the exterior of this residential complex, which exhibits a sharp form through its linearity.

We wanted 'wood charisma' but wood can be very high maintenance. The advantage of Trespa®'s panels is that they resemble wood very well, but are actually a high-pressure compact laminate," Heugenhauser says.

Reiter was also very keen to use Trespa® panels, "because we thought they would help us achieve the natural look we were after". Another key benefit, he says, is that they are very easy to maintain. "They will look as good in six or seven years' time as they do today. That's a major advantage, as 'regular' wood can start to look tatty after a few months and cause dirty streaks to run down the building, which we were keen to avoid."

Supporting the choice of panels, Achim Reckziegel, from specialist façade contractor Thiel Montage GmbH, Feucht, adds that they "really look like wood, so the overall effect is more realistic".
Energy saving was also a key issue. According to Heugenhauser, it was very important to both the investor and WWA to use natural materials.
"We have used oak floors in the majority of the apartments [buyers had the option of choosing an alternative]. In addition, we used a lot of insulation – for example, we used 30cm of expanded polystyrene in the plaster and 15cm of Styropor to insulate the construction behind the Trespa® panels. We wanted to meet the criteria of Germany's Energieeinsparverordnung, or Energy Savings Act," he says. Additionally, the roofs have been planted with a variety of grasses.

"This project was built with sustainability in mind".

Ditrich Reiter

THE LEGO EFFECT

Unlike many residential complexes, which tend to be identical – and soulless – Heugenhauser and his team were determined to come up with a design that would stand out but also pack an eco punch.

Instead of opting for four generic 'cubes', WWA has alternated living spaces and balconies, creating a dynamically stacked, Lego-esque look. For example, the terrace on the first floor of the south building cantilevers out by about 8m.
However, the complicated, overhanging design threw up some construction challenges when work got under way in March 2010. "We decided not to stack all of the balconies on top of each other but to alternate them. This was very challenging for the constructors who weren't used to building such complex designs," Heugenhauser says.

Reckziegel comments that "The façade was challenging, partly because the build time – of around eight weeks – was really too short. In addition, due to the design of the buildings, we sometimes had to manoeuvre the panels into small spaces".

Although the construction was demanding, Reckziegel enjoyed working with Trespa due to the support from start to finish: "The entire picture: the product, the offered service and support, the colours, the quality, competence of the area managers and the technicians." What assisted the construction was that Thiel Montage had used Trespa® on other projects and was familiar with the fixing system. "Due to our long experience with Trespa, we had no problems and TS700 is an easy fixing system to install."

Another interesting design component is the balcony railings. Instead of just running the railings along the length of each balcony, WWA decided to make them longer than strictly necessary, spanning from 4m to 8m. "As such, they actually run through the cladding, which creates a very nice optic," Heugenhauser says.

PAYING OFF

It was clearly worth all the effort and attention to detail. All 36 apartments have since sold for around € 3000 per m² and buyers have been very happy, according to WWA. "We are now planning other residential projects with the same investor," Heugenhauser says.

For Reiter, the mixture of Trespa® panels, windows of different sizes and the sculptured terraces "gives these buildings a really special edge." The other key aspect of the project, he adds, was that it was built with sustainability to the fore: "This project was built with sustainability in mind. It had to work for residents not just today but also in the future. We are very pleased with how it turned out." ■

At night a new aesthetic is created by a play of lighting, breaking up the combination of white concrete and wood textures in a subtle way.

NEW WOOD DECORS

NW18
LIGHT MAHOGANY

ON THE ROAD TO SUSTAINABILITY

IN 2010 TRESPA ASKED GLOBAL SUSTAINABILITY CONSULTANT PE INTERNATIONAL TO LEND A HAND IN LEARNING ABOUT THE COMPANY'S IMPACT ON THE ENVIRONMENT. WHAT TRESPA WANTED WAS A RECOGNISED ORGANISATION TO HELP TEST AND, MORE IMPORTANTLY, UNDERSTAND SUSTAINABILITY DATA SO THAT IT COULD CREATE SIGNIFICANT SOLUTIONS THAT WOULD PROTECT THE ENVIRONMENT AND REDUCE THE HIDDEN COSTS ASSOCIATED WITH WASTE.

Anna Braune
PE INTERNATIONAL's environmental engineer

PE INTERNATIONAL's environmental engineer, Anna Braune, has been working with Trespa to support its green philosophy, 'Do No Harm, Do Good, Do Better'. Having been involved in the process from the initial lifecycle analysis, Braune has witnessed at first hand Trespa's commitment to being more sustainable. Here, she shares her enthusiasm for the company's rigorous steps in becoming a responsible, successful and green international organisation.

UNDERSTANDING DATA

Braune says it was clear as soon as Trespa first contacted PE INTERNATIONAL that it wanted to make a real, calculated difference to its processes – from raw materials to the end of products' lives. "It was Trespa's passion to learn about environmentally related data – materials, waste, energy consumption, emissions in the air from heating, products they manufacture and the afterlife of these products – that has strengthened their position as a serious sustainable company," she says. ▸

1994

TRESPA COMMISSIONED ITS FIRST LIFE-CYCLE ASSESSMENT (LCA). TRESPA WAS ONE OF THE FIRST COMPANIES IN THE INDUSTRY WHO COMMISSIONED A LCA. THE RESULTS WERE USED TO ANALYSE A NEW DEVELOPMENT WITHIN TRESPA THAT MADE IT POSSIBLE TO SUBSTITUTE KRAFT PAPER WITH WOODCHIPS FOR A LARGE PART OF THEIR PRODUCT PORTFOLIO.

About Anna Braune

2003
GRADUATED WITH A MASTERS DEGREE IN ENVIRONMENTAL ENGINEERING FROM TECHNICAL UNIVERSITY BERLIN AFTER STUDYING AT EPFL LAUSANNE. STARTED WORKING AS A RESEARCH ASSISTANT AT UNIVERSITY OF STUTTGART IN THE DEPARTMENT LIFE CYCLE ENGINEERING.

2007
INITIATED THE GERMAN SUSTAINABLE BUILDING COUNCIL (DGNB) AND SERVED AS CEO OF THE COUNCIL. SHE WAS RESPONSIBLE FOR THE DEVELOPMENT AND LAUNCH OF THE FIRST LIFECYCLE-BASED SUSTAINABLE BUILDING CERTIFICATE.

2013
BECAME AN ENVIRONMENTAL ENGINEER AT PE INTERNATIONAL IN 2009, CURRENTLY MANAGING NUMEROUS PROJECTS, SPECIALISING IN THE CERTIFICATION OF BUILDINGS, LIFECYCLE ASSESSMENT, ENVIRONMENTAL PRODUCT DECLARATIONS (EPD) AND DGNB AUDITS.

PE INTERNATIONAL's methodology for analysing environmental impacts is "robust and presents one of the most fact-based results for a company to base changes on", she adds. "What was special about Trespa from the beginning was their honest approach and passion to want to learn about what we were telling them – the meaning of the data and how far they could take it."

CURIOUS AND PASSIONATE

Once Trespa was confident of understanding the results of the data it collected – from all of the stages involved in its products – PE INTERNATIONAL handed over the tools to allow the company to independently calculate and monitor its impacts.
"From the outset, all the staff we worked with were curious about the numbers they were collecting. Once they understood how they could make improvements with this data, they pushed further – they probed more," says Braune. "Having their own sort of in-house environmental kit to make quick calculations, for real situations and potentialities, opened up a whole new perspective for Trespa."

A SINCERE AND SEVERE ATTITUDE

The next big step Trespa took was quite a bold move. The company decided to communicate the results of its environmental testing through EPD (Environmental Product Declaration) certification: "Trespa chose the most severe form of communicating the environmental numbers related to the Trespa® Meteon® FR and Meteon® Standard product range and its impacts. What resulted was a clear display of transparency and a reason for customers to really trust Trespa's intentions and product."
"Getting an EPD is not an easy process," Braune adds. "It requires complete exposure and to go above and beyond in order to collect original data. This speaks volumes."

A HOLISTIC APPROACH

"Because its procedure is firm and supported by official documentation, Trespa also avoids any connections with 'greenwashing'," Braune says. "I have never felt like the initiatives they were pursuing were 'on the side' to tick green boxes. In meetings, staff members from all positions and areas of responsibility took part in the company's sustainable agenda. It's not just some selected technical members that want to do good, it's the entire company."
"This is really the basis towards a company changing for the better – that it's not just a hobby, it's real passion to impose positive change."

ALWAYS LOOKING FORWARD

One way to judge your company's impact on the environment is to separate your assessment into past impact, present effects and future goals. Not all companies opt to test future scenarios, but Trespa shows a real drive to "Do Better", by viewing impacts from the client's perspective as well as its own. Braune calls this "an enhanced product responsibility", describing how Trespa continues to assess the product after it has been delivered – how it is being used, what its end-of-life impacts are and how they can be reduced.

STANDING OUT

Braune has been impressed by how Trespa distinguishes itself from other companies – particularly as one of the first to receive both PEFC™ and FSC™ certification in recognition of its commitment to sustainable harvesting. "You have to have these certificates," she says. "They show that you care about ensuring biodiversity on one side and that you believe in fair working conditions in countries on the other. If you use wood in your products, then you should have these certificates."

Trespa is also involved with three EPD systems for the Trespa® Meteon® FR and Meteon® Standard product range – from the UK, France and Germany – which Braune thinks can only be a good thing. "What I like about the EPDs is that they have chosen three different types and set themselves some challenges to try and accommodate the different markets they work in.
By having these declarations, Trespa allows architects to generate better buildings, as the results contribute real data to the overall sustainability quotas given for the whole project."

A GREAT EXAMPLE

But Trespa does not just gather certificates; it wants to constantly build on its achievements. This is something that Braune believes it is well equipped to do: "Based on our working relationship and given their attitude and commitment, Trespa is bound to have better results in the future."

PE INTERNATIONAL has seen a noticeable improvement over the years, having worked with Trespa from the lifecycle analysis of its processes and products to obtaining EPDs and looking at future scenarios. Braune says it draws on Trespa as "a great example for taking responsibility, making genuine changes towards a better environment and encouraging other organisations to become more ecologically aware". ▪

"Getting an EPD is not an easy process. It requires complete exposure and to go above and beyond to collect original data." *Anna Braune*

Trespa is now able to calculate future scenarios, answering questions such as: What would happen if we cut the edges of our panels in a different way? What would happen if we increased the thickness of our panel and added flame retardant? And what would happen if we reduced our total gas consumption by 10%?

Braune stresses how inquisitive and involved the company is in producing better products and processes for the future. "They can see the impact of the entire value chain and where real savings can be made."

2010
TRESPA CONTACTED PE INTERNATIONAL TO ORGANIZE A SECOND LCA. SINCE THE FIRST LCA, THE ENVIRONMENTAL ANALYSIS METHODS HAD ADVANCED, SHOWING ONE OF THE MOST RELIABLE FACT-BASED WAYS OF CALCULATING ENVIRONMENTAL IMPACTS TO DATE.

2011
THE SECOND LCA WAS CARRIED OUT. THE RESULTS WERE USED TO CREATE INITIATIVES FOR TRESPA'S RENEWED SUSTAINABILITY POLICY.

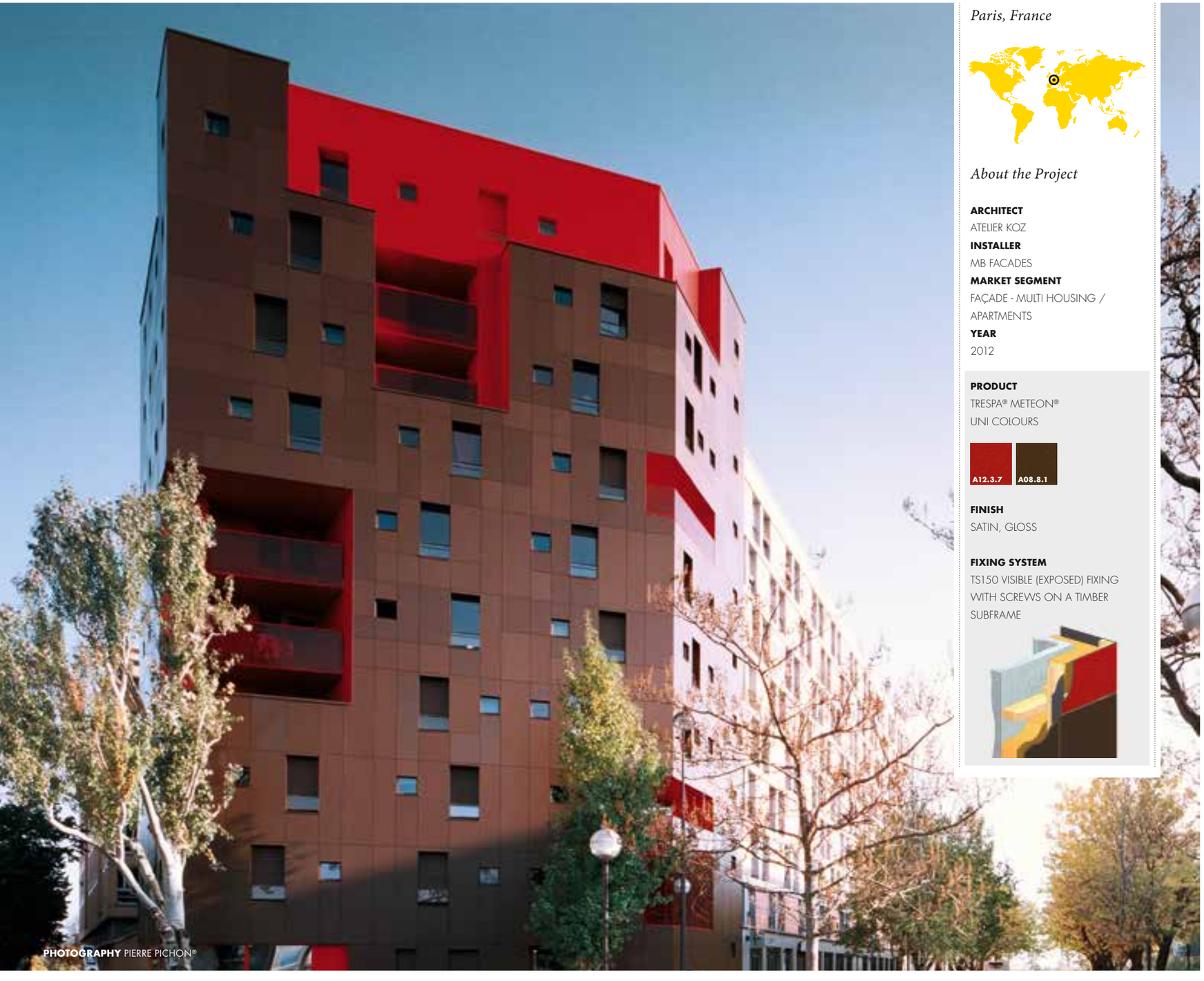
2012
TRESPA DECIDED TO COMMUNICATE THE RESULTS OF ITS ENVIRONMENTAL ASSESSMENT THROUGH ENVIRONMENTAL PRODUCT DECLARATIONS FOR THE TRESPA® METEON® FR AND TRESPA® METEON® STANDARD PRODUCT RANGE. TRESPA RECEIVED THE DECLARATIONS FROM AFNOR (FDE&S, FRANCE) AND IBU (GERMANY).

2013
TRESPA RECEIVED THE ENVIRONMENTAL PROFILE CERTIFICATE FROM BBA (UK).

PEFC™ PEFC/30-31-060 Promoting Sustainable Forest Management www.pefc.org

FSC™ www.fsc.org FSC™ C114684 The mark of responsible forestry

2013
THE ENTIRE TRESPA® METEON® RANGE IS AVAILABLE WITH PEFC™ OR FSC™ CERTIFICATION UPON REQUEST.



PHOTOGRAPHY PIERRE PICHON®

Paris, France

About the Project

ARCHITECT
ATELIER KOZ
INSTALLER
MB FACADES
MARKET SEGMENT
FAÇADE - MULTI HOUSING / APARTMENTS
YEAR
2012

PRODUCT
TRESPA® METEON®
UNI COLOURS

A12.3.7 A08.8.1

FINISH
SATIN, GLOSS

FIXING SYSTEM
TS150 VISIBLE (EXPOSED) FIXING WITH SCREWS ON A TIMBER SUBFRAME

STUDENT HOUSING

GAME-BASED SURFACES

APTLY NAMED AFTER TETRIS, THE GAME IN WHICH FALLING CUBES CREATE ODDLY INTERCONNECTING SHAPES, THIS BUILDING BOASTS A FAÇADE OF 'SCARLET' RED AND 'CHOCOLATE' BROWN BLOCKS THAT PUSH AND PULL THE FORM.

THE DESIGN, BY LOCAL PRACTICE KOZ ARCHITECTES, ALSO INCORPORATES A SUCCESSION OF TERRACES THAT APPEAR ON THE EXTERIOR AS SUBTRACTED RED BLOCKS. THE ARCHITECTS CONTINUE TO PLAY WITH SURFACES INSIDE THE BUILDING, WHERE THE RED THEME IS REPEATED ON THE FLOORS, WALLS AND CEILINGS.

SHARED TRESPA® METEON® QUALITIES

The new finish exhibits as good a performance as the existing Trespa® Meteon® finishes in durability, cleanability and longevity.

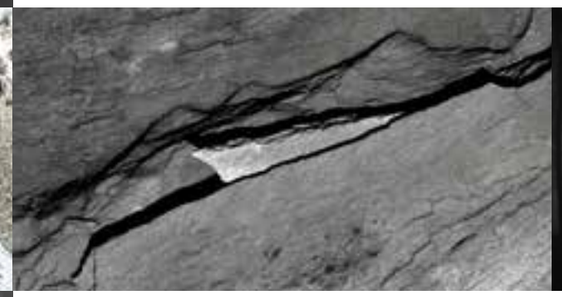
NEW COMBINATIONS

A new look can be achieved by using the new Matt finish alongside the existing Trespa® Meteon® Satin, Rock and Gloss finishes, as well as with other façade materials such as metal and stone.

NATURAL TOUCH

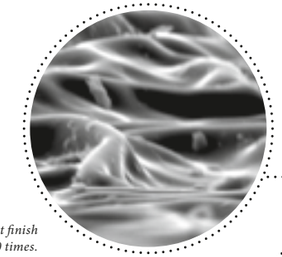
A natural feeling panel facilitates a unique, tactile experience. Its surface is matt from every angle.

CLOSER TO NATURE
MATT FINISH

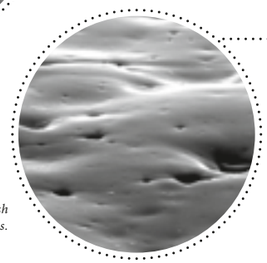


THE NEW MATT FINISH ACCENTUATES AN AUTHENTIC AND NATURAL SENSE IN FAÇADE DESIGN.

"The new finish offers an additional connection to nature with its softer feel."



Matt finish magnified 2500 times.



Satin finish magnified 2500 times.

Difference between the Satin finish and the new Matt finish.

METEON® WOOD DECORS AVAILABLE IN MATT FINISH

METEON® NATURALS AVAILABLE IN MATT FINISH

EXPERIENCE THE NEW MATT FINISH BY ORDERING A SAMPLE PACK FROM TRESPA.COM/NEW

INTRODUCING MATT

The importance of natural looking products in today's design industry cannot be underestimated. Buildings require advanced materials to help in their durability and utility. Aside from important technical qualities, they can also benefit hugely from a variety of aesthetic options that touch base with more natural and traditional finishes. Over the last 50 years, Trespa has created a palette of colours and finishes to match new ideas that offer architects unprecedented choices in façade aesthetics. To further increase this choice, Trespa introduces its new Matt finish, which promotes a new experience in façade design – going back to nature as its muse.

The new Matt finish has the same outstanding qualities and outdoor endurance as the existing Trespa® Meteon® finishes, but reveals a more natural touch and appearance. Enhanced by its availability in Trespa® Meteon® Naturals and Wood Decors, which replicate nature, the new finish offers an additional connection to nature with its softer feel.

DURABILITY

Maintaining the same resistance to weathering as existing Trespa® Meteon® finishes, the new surface also offers a good performance. Confident in its durability, Trespa offers a 10 year product warranty* which promises colour stability amongst other features. Three thousand hours of weather exposure simulator testing showed outstanding performance and guarantees the product's longevity worldwide.

CLOSED SURFACE STRUCTURE

The new Matt finish has a closed surface structure keeping the product smooth and easy to clean. A variety of graffitis have been tested and demonstrate this** (please visit trespa.info for cleaning instructions).

NEW DECORS IN MATT

The entire range of Meteon® Naturals and a special selection of Meteon® Wood Decors (chosen with advice from prominent international architects) are available in the new Matt finish. Combining these decors brings an unprecedented range of natural style options to architectural designs, while preserving Trespa's goal to create façades that endure and continue to prove their quality. ▪

* **NOTE** Please contact your local sales representative for more information.
****NOTE** The test is executed at Trespa's laboratory.

NEW WOOD DECORS

NW21 AUSTRALIAN PINE

ALSO AVAILABLE IN MATT FINISH

GLOBAL TALKS GREEN

AS THE WORLD BECOMES MORE CONCERNED WITH ADDRESSING GLOBAL WARMING AND RESOURCE SCARCITY, THE DESIGN OF BUILDINGS HAS BECOME A FOCAL POINT FOR DEBATE. THE BUILDING SECTOR CONTRIBUTES A HIGH PERCENTAGE OF GLOBAL ANNUAL GREENHOUSE GAS EMISSIONS AND CONSUMES AN EVEN HIGHER PERCENTAGE OF ALL ENERGY. HERE, WE ASK ARCHITECTS AROUND THE GLOBE THEIR VIEWS ON SOME KEY TOPICS.

PETER SCHLOSSMAN
PRINCIPAL,
LOEBL SCHLOSSMAN & HACKL

SALIM HUSSAIN
ARCHITECT,
BROADWAY MALYAN

DUAN WEI
PROJECT MANAGER / PROJECT DESIGNER,
GBBN ARCHITECTS

HOW VALUABLE IS WOOD IN SUSTAINABLE FAÇADE CONSTRUCTION – FROM THE FRAME TO THE PANEL?

USA PETER SCHLOSSMAN

We consider wood to be sustainable because manufacturing of wood consumes less embodied energy than other materials. It is also a renewable resource – another criterion of sustainable design. However, wood should be carefully selected to avoid sources that are in environmentally threatened areas of the world. Also, when choosing sustainable products, it's important to look at the entire lifecycle of the materials and the needs of the building of which they will be a part, as replacing materials can sometimes be more detrimental to the environment than the original construction.

EUROPE SALIM HUSSAIN

Wood is a very valuable sustainable material; it is also very diverse and can be used as structural framing or broken down and processed to become façade panels. At Bournville [Campus designed by Broadway Malyan in Birmingham, UK], we have both extremes: on one side the glulams are formed from Siberian larch timber strips to create the 24m structural framing and on the other we have the Trespa® panels that comprise the majority of the façade. Wood is also flexible in the ways that it can be finished, ranging from no finish to bespoke colours applied to panels. By ensuring the timber is obtained from a sustainable source, this opportunity for future cycles/ users/ specifiers is ensured and is a critical factor when considering which product is specified.

ASIA DUAN WEI

Wood has the characteristics of being flexible, warm, sustainable and aesthetically pleasing. It offers a great way to integrate local materials into the construction of exterior façades. I think it's a very valuable material to use in achieving sustainable objectives. ▸

"Wood has the characteristics of being flexible, warm, sustainable and aesthetically pleasing." *Duan Wei*

2

DIFFERENT COUNTRIES REQUIRE DIFFERENT ENVIRONMENTAL ASSESSMENT SCHEMES TO MARK A BUILDING'S GREEN CREDENTIALS, AND COMMONLY THE RESULTS ARE EXHIBITED AS CERTIFICATES. ARE THESE EFFECTIVE TOOLS IN DISTINGUISHING LEADING DESIGNS?

USA PETER SCHLOSSMAN

Within the US, LEED certification, regulated by the United States Green Building Council, (USGBC), is the most well-known measure in the sustainable design movement. It is a useful gauge in how eco-friendly a building is, but there are some drawbacks to this form of measurement. LEED certification is based on a point system in which if a building lacks credentials in, for instance, energy consumption, it can make up for this by including a number of arguably less significant sustainable features. For this reason, LEED certification has been criticised as not being an accurate means to determine sustainability, but at the moment it is the most accepted means available in the US.

There are other ways to judge the success of a building's sustainable strategy that are equally, if not more, valuable. An alternative to LEED is the Green Globes system, an online assessment rating system that uses a third-party verification. It is operated by the Green Building Initiative and can be more affordable than LEED. Additionally, there are codes that regulate and measure energy consumption, and these are extremely useful in green design as well.

EUROPE SALIM HUSSAIN

These certificates are very critical in developed markets and are becoming increasingly important in emerging markets. The emerging markets have adopted and then adapted the more mature systems, which in some senses provides them with a headstart. Enforcement is now becoming more stringent and compulsory thus ensuring this does not become a token gesture. At the crudest level, the ability to measure the efficiency of a building gives the client an understanding of the benefits of the investment they are making. As energy costs rise and resources become scarcer, all parts of the globe will need to take this issue seriously. As technology has advanced, the ability to build not only the biggest and best, but the greenest has become an achievable reality.

ASIA DUAN WEI

Certain certificates are important tools to measure the success of designs that try to exhibit sustainability. Without a benchmark, we would be assuming figures and comparing results would be arbitrary. Recognised assessments provide quantifiable data, which is important.

> "These certificates are very critical in developed markets and are becoming increasingly important in emerging markets." *Salim Hussain*

3

THE WORDS 'SUSTAINABLE' AND 'GREEN' ARE THROWN AROUND THE BUILDING INDUSTRY THESE DAYS AS A MARKER FOR GOOD DESIGN. WHEN IT COMES TO FAÇADE DESIGN, WHAT DO YOU THINK WOULD WARRANT THESE LABELS?

USA PETER SCHLOSSMAN

Façades that are high-performing can reduce energy consumption, and will ultimately pay back the embodied energy involved in their manufacture. Façades that are durable and therefore minimise maintenance and repair for their entire lifetime should also be considered part of green design. In terms of their function, it is essential that sustainable façades control the amount of heat, air and moisture that travel between the exterior and interior of a structure.
A building's insulation and its air and vapour barriers are key components of sustainable design. We evaluate a façade system based on its ability to provide sufficient insulation and to minimise air and water infiltration. Rainscreen-type façades are an effective means of controlling all of these factors and are intrinsically sustainable.

EUROPE SALIM HUSSAIN

For any product, a key approach to sustainability is to consciously control the process – from sourcing materials to production to installation. This holistic approach starts by ensuring the products are resourced responsibly, minimising wastage throughout the manufacturing process and then minimising installation waste. Recycling is integral to the process, not something done only when the packaging is removed on site. This not only makes 'green' sense, it makes economic sense in eliminating the need to buy, produce and transport materials that will only be discarded.

ASIA DUAN WEI

Sustainable façade design requires the consideration of how the façade is integrated into the project at all levels. The material qualities are important – coming from sustainable resources and preferably local supplies – and their functionality is equally important. They need to be durable and integrate into their context – this makes them technically and aesthetically 'sustainable'. ▪

> "Rainscreen-type façades are an effective means of controlling all of these factors and are intrinsically sustainable." *Peter Schlossman*

Haßfurt, Germany

About the Project

ARCHITECT
BAUR CONSULT INGENIEURBÜRO
INSTALLER
PLETZ FASSADENBAU GMBH
MARKET SEGMENT
FAÇADE - EDUCATION
YEAR
2012

PRODUCT
TRESPA® METEON®
UNI COLOURS

A05.0.0 A17.3.5

FINISH
SATIN

FIXING SYSTEM
TS700 VISIBLE (EXPOSED) FIXING WITH RIVETS ON A METAL SUBFRAME

NOTE The availability of the design shown may vary per region/country, depending on specific location, regulations and circumstances. The Material Property Datasheet of Trespa® Meteon® is not applicable for Helix applications. Always check if the desired design is in accordance with any national and/or local building regulations and specifications.

EDUCATION CENTRE

HELIX SHAPES BREAK THE CALM

A WHITE FAÇADE WRAPS AROUND THE NEW SCIENCE WING OF AN EDUCATION CENTRE IN HAßFURT, NEAR FRANKFURT. THE ARCHITECT WANTED THE BUILDING TO LOOK 'CLEAN AND CLINICAL', WHILE LOWERING ENERGY COSTS.

WHAT RESULTED IS A LARGELY HOMOGENEOUS WHITE FAÇADE, BUT WITH ONE SIDE INTERRUPTED BY HELIX-SHAPED DECORATIVE PANELS THAT STRETCH TO ALMOST THE FULL HEIGHT OF THE BUILDING. PLACED IN FRONT OF A GLASS CURTAIN WALL, THE TWISTING WHITE AND PINK PANELS SHADE THE BUILDING AND CREATE A COMPELLING ILLUSION.

AN INTERVIEW WITH PETER KUHN, LEAD ARCHITECT AT BAUR CONSULT INGENIEURBÜRO, AND MORE PROJECT IMAGES CAN BE FOUND ONLINE AT **TRESPA.COM/UK/NEWS/HELIX**

NEW NATURALS

NA14
WEATHERED BASALT

AVAILABLE IN MATT FINISH

"It offers more design freedom with the ability to shift the arrangement of panels both horizontally and vertically, whilst also offering an 'invisible look'."

TS200

INVISIBLE (CONCEALED) FIXING WITH BRACKETS ON RAILS

THE TS200 FIXING SYSTEM OFFERS CONTRACTORS A FAST AND FLEXIBLE INSTALLATION METHOD FOR TRESPA® METEON® PANELS IN THE EUROPEAN AND ASIAN MARKETS. ARCHITECTS ARE PRESENTED WITH INCREASED DESIGN OPTIONS THROUGH THE INVISIBLE FIXING SYSTEM. THE SYSTEM IS AVAILABLE IN A VARIETY OF PANEL DIMENSIONS AND THICKNESSES. IT ALSO PRESENTS OPPORTUNITIES TO PLAY WITH ORIENTATION, CREATING AN OPTIMAL FAÇADE GRID TO SUIT UNIQUE DESIGN CONDITIONS. ▸

TS200
INVISIBLE (CONCEALED) FIXING WITH BRACKETS ON RAILS

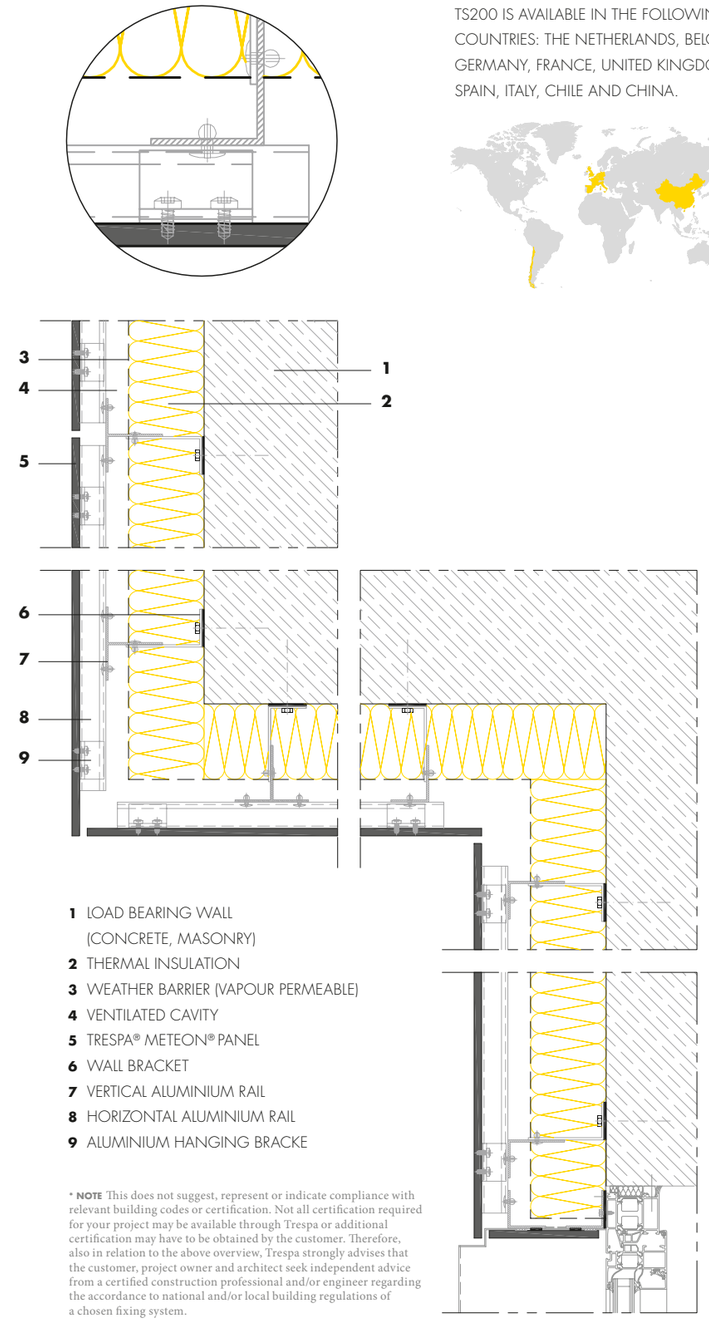
PLEASE CHECK **TRESPA.INFO** FOR THE COMPLETE AND THE MOST UP-TO-DATE TECHNICAL INFORMATION

Four simple steps assist in achieving the 'invisible look' using the TS200 fixing system. Trespa® Meteon® panels, with a minimum thickness of 10 mm, may be fixed invisibly on an aluminum sub-frame comprising horizontal rails and hanging brackets which are fixed with inserts or screws to the back of the panel.

TO INSTALL THE FAÇADE

1. The horizontal aluminum rails can be fixed on a vertical timber or aluminum sub-frame. Some countries may allow the use of a stainless/ galvanized steel sub-frame.
2. The Trespa® Meteon® panels must be installed on a sub-frame of sufficient strength and permanent durability. Quality and/ or treatment of the sub-frame must be in accordance with applicable building standards, regulations and certificates.
3. Panel brackets are attached to the Trespa® Meteon® panels using two stainless steel inserts or screws per bracket. The brackets and horizontal rail sizes must correspond to fit each other.
4. As this is a continuous hanging system, panels must be installed from the bottom upwards. The panel bracket connection to the support rails must permit the possible movement of the panel.

HORIZONTAL CROSS-SECTION



1 LOAD BEARING WALL (CONCRETE, MASONRY)
2 THERMAL INSULATION
3 WEATHER BARRIER (VAPOUR PERMEABLE)
4 VENTILATED CAVITY
5 TRESPA® METEON® PANEL
6 WALL BRACKET
7 VERTICAL ALUMINIUM RAIL
8 HORIZONTAL ALUMINIUM RAIL
9 ALUMINIUM HANGING BRACKE

* **NOTE** This does not suggest, represent or indicate compliance with relevant building codes or certification. Not all certification required for your project may be available through Trespa or additional certification may have to be obtained by the customer. Therefore, also in relation to the above overview, Trespa strongly advises that the customer, project owner and architect seek independent advice from a certified construction professional and/or engineer regarding the accordance to national and/or local building regulations of a chosen fixing system.

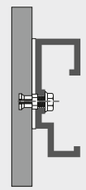
AVAILABILITY

TS200 IS AVAILABLE IN THE FOLLOWING COUNTRIES: THE NETHERLANDS, BELGIUM, GERMANY, FRANCE, UNITED KINGDOM, SPAIN, ITALY, CHILE AND CHINA.

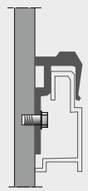
FIXING DETAIL

- HOLE DEPTH, HOLE DIAMETER, LENGTH AND ANCHORING DEPTH OF FIXINGS HAS TO BE IN ACCORDANCE WITH APPLICABLE CERTIFICATES AND INSTALLATION GUIDELINES.
- EACH PANEL MUST HAVE TWO ADJUSTING POINTS.
- TO RETAIN PANEL POSITION, THE PANEL MUST HAVE ONE FIXED POINT AT THE TOP, ACHIEVED BY INSERTING A SELF-DRILLING SCREW (OR SIMILAR) THROUGH THE HANGING BRACKET AND INTO THE RAIL.
- REMAINING PANEL THICKNESS: AT LEAST 2.5 MM
- ANCHORING DEPTH: TOTAL PANEL THICKNESS MINUS 3 MM (IF NOT SPECIFIED OTHERWISE IN APPLICABLE CERTIFICATES).
- DUE TO AESTHETICS, THE USE OF GLOSS PANELS IS NOT RECOMMENDED FOR THIS SYSTEM.

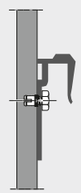
CONICAL INSERT



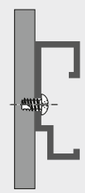
TU-S FASTENER (RIVET SCREW)



STRAIGHT INSERT



THREAD CUTTING SCREW



NEW WOOD DECORS

NW23
NORDIC BLACK

ALSO AVAILABLE IN MATT FINISH

RULES OF **GOOD SERVICE**

KAREN PICHAL MANAGES THE CUSTOMER SERVICES TEAM AT TRESPA, MAKING SURE THE QUERIES BETWEEN CUSTOMERS AND TRESPA ARE DEALT WITH EFFICIENTLY AND ON A PERSONAL BASIS.

THE TEAM HANDLES THE PROCESS FROM INITIAL INQUIRY, ORDERING THE MOST APPROPRIATE PRODUCT FOR THE PROJECT, TO THE PRODUCT BEING DELIVERED ON TIME. SHE TELLS US HOW IT IS IMPORTANT TO 'GO THE EXTRA MILE' AS COMMUNICATION IS VITAL IN BUILDING GOOD, LASTING RELATIONSHIPS AND ACCELERATING FUTURE POSSIBILITIES WITH PEOPLE AND PRODUCTS. ▸

SPIDER IN THE WEB

Born in Belgium, Karen has been working with Trespa for over 13 years. In this time, she has moved from working as an order processor to a team leader and is now heading the customer services team in Europe. Her own journey with Trespa shows an insight into some of the core values the services team hold: passion for the product, the process and the desire to build relationships – locally, globally, physically and digitally.

She also gives us some facts and figures about what the team achieves today and a glance into what customers can expect in the future.

> "The customer services department at Trespa is always referred to as the 'spider in the web'."

HOW IMPORTANT IS THE CUSTOMER SERVICES DEPARTMENT TO TRESPA?
The customer services department at Trespa is always referred to as the 'spider in the web' of Trespa, connecting vital departments. We are the link between the customer, production, logistics, product management, sales, marketing teams and all other departments. As well as being a central node for these functions, the customer services department plays a vital role in supporting our global customers - we have teams working in Europe, Asia and the US to support cross-continental relationships. Trespa is a very customer-oriented company and therefore the department plays a very important role in the organisation – it synchronises so many activities in the company while making sure that the customer is always at the forefront of our attention.

HOW WOULD YOU DEFINE 'GOOD SERVICE'?
Good service is all about bringing customers back and about sending them away happy. Customers only come back if you are able to deal with their request and we promise to react within one working day. If you are able to show them reliability, flexibility and the personal touch, then I think you are demonstrating a 'good service'. There is no 'one way for all' and I can honestly say, at Trespa, we deal with each person individually and the idea of offering 'good service' is always buzzing in the background. All of the team strives to achieve this goal, using our 'rules of good service' as the backbone in our decision-making whenever we can. We've set a great target with these rules and our plan is to make sure we stick to it as closely as possible.

WHAT KIND OF PEOPLE WORK IN THE CUSTOMER SERVICES DEPARTMENT?
We have got people from various nationalities and backgrounds, which not only makes the working environment exciting and diverse but adds a practical bonus – we can reach more people through the ability to speak many languages. Within our teams we have people from 12 different nationalities with the capacity to speak 10 different languages. The main factor they have in common is that they are all naturally passionate and have a heart for Trespa. Some have been working here for 40 years but if you talk to them it still feels like it is their first working day.

When hiring new people, during the interview they need to exhibit a natural passion as part of their personality, but also for the product and company values. Having this is more important to us than the technicalities about the job – those we can train.

HOW DO YOU GO THE EXTRA MILE FOR CUSTOMERS?
The essence is forming a relationship with the customer – a personalised approach is needed in order to get this going. The better and quicker you understand the customer's request, the better you will be able to deal with it. We try to offer as much support by native speakers in order to let the customer feel at ease.

In 2010, we started to train our internal sales teams to approach enquiries and prospects more deeply. This requires finding out and evaluating as much information about the architect's style and requirements so that a tailor-made package is accessible to them. It really adds to the final project. For example, if we're looking to assist an architect with a product for the education sector, we'll do a lot of in-house research in this area from our archives and any future combinations we can offer to really show them the full spectrum of Trespa. ▸

THE SERVICE RULES WE STRIVE TO ACHIEVE EVERY DAY!

THE **CUSTOMER SERVICE** CAN BE REACHED THROUGH
TOLL FREE
OR LOCAL PHONE NUMBERS

ORDER CONFIRMATION FOR STANDARD PRODUCTS ARE SENT OUT
WITHIN 48 HOURS
AFTER RECEIVING YOUR ORDER

WE HAVE THE ABILITY TO ASSIST YOU IN
10
DIFFERENT LANGUAGES

EVERY CHANGE **IN THE DELIVERY PROGRAMME** IS ANNOUNCED
3 MONTHS AHEAD

WE HAVE A
98%
RELIABILITY OF SUPPLY
WITHIN THE CONFIRMED LEAD TIME
in the other 2% we call to inform upfront.

AN EXTENSIVE RANGE OF SAMPLES AND DOCUMENTATION
WE SERVICE YOU TO MAKE THE RIGHT CHOICES BY OFFERING

IF A CUSTOMER CALLS WITH AN ODD QUERY OR REQUEST, HOW DO YOU MANAGE IT?
Each customer request is taken seriously. We have set up a procedure to deal with non-standard requests in which we have formulated some rules. If we ever get questions that don't fit in this framework, specialists look more deeply into the request. We will always try to solve the request or offer a good alternative.

IS THERE A TIME LIMIT TO HOW LONG YOUR TEAM CAN SPEND WITH ONE CUSTOMER?
No, whatever is needed we do – good customer service hasn't got time restraints.

WHAT ARE YOUR CURRENT STRENGTHS AS A DEPARTMENT?
Trespa is a very open organisation and believes in the power of learning. We give our employees a lot of responsibility and train them so that they are able to solve problems themselves or find solutions in innovative ways. We try to avoid what you see happening at other customer services departments – you get lost in forwarded calls to end up with a dead line.
We aim at getting the first person who picks up the call to be able to give a good answer to solve the request.

The people who work here show enthusiasm and positive thinking – these are factors to success in this department. The flexibility and creativity within our team is unique and pushes the department beyond what's expected.

When visitors or new members join us they say that they can feel the energy coming from our department. This is the enthusiasm of the team reflecting. The way we treat our people shows in the way we treat our customers: with respect.

WHY DO YOU THINK THE INTERNATIONAL MARKET HAS BEEN SO SUCCESSFUL AND CONTINUES TO GROW FOR TRESPA?
In our market we are one of the most reliable manufacturers. This doesn't only refer to the quality of the product but also to the delivery times. We show 98% reliability of supply within the confirmed lead time, and in the other 2% we call to inform any changes upfront. We try to present the best solution we can whilst offering a honest and realistic approach to every situation. We see ourselves as a no-nonsense company and this quality is appealing to the international market, hence Trespa's growth into the US and Asian markets.

WHAT WOULD YOU LIKE TO SEE THE CUSTOMER SERVICES DEPARTMENT DOING NEXT?
We would like to grow in a digital sense. We're already working with the paperless office concept for years, with the aim to reduce the number of paper. In the future we want to keep on building on this. Future plans revolve around integrating our services with web applications better. We want to offer a call-me-back service online and a 24-hour web forum, assisting customers with their queries around the clock. It's all about offering convenience and flexibility all of the time, instead of most of the time – that's the goal. ▪

> "The flexibility and creativity within our team is unique and pushes the department beyond what's expected."

CUSTOMER REQUESTS ARE DEALT WITH WITHIN

1 WORKING DAY

COMPLAINTS ARE DEALT WITH
ON THE DAY OF ARRIVAL
AND RESOLVED IN
MAX 60 DAYS

WE WORK WITH
FIXED DELIVERY SCHEDULES
AND DAYS FOR YOUR COUNTRY AND REGION

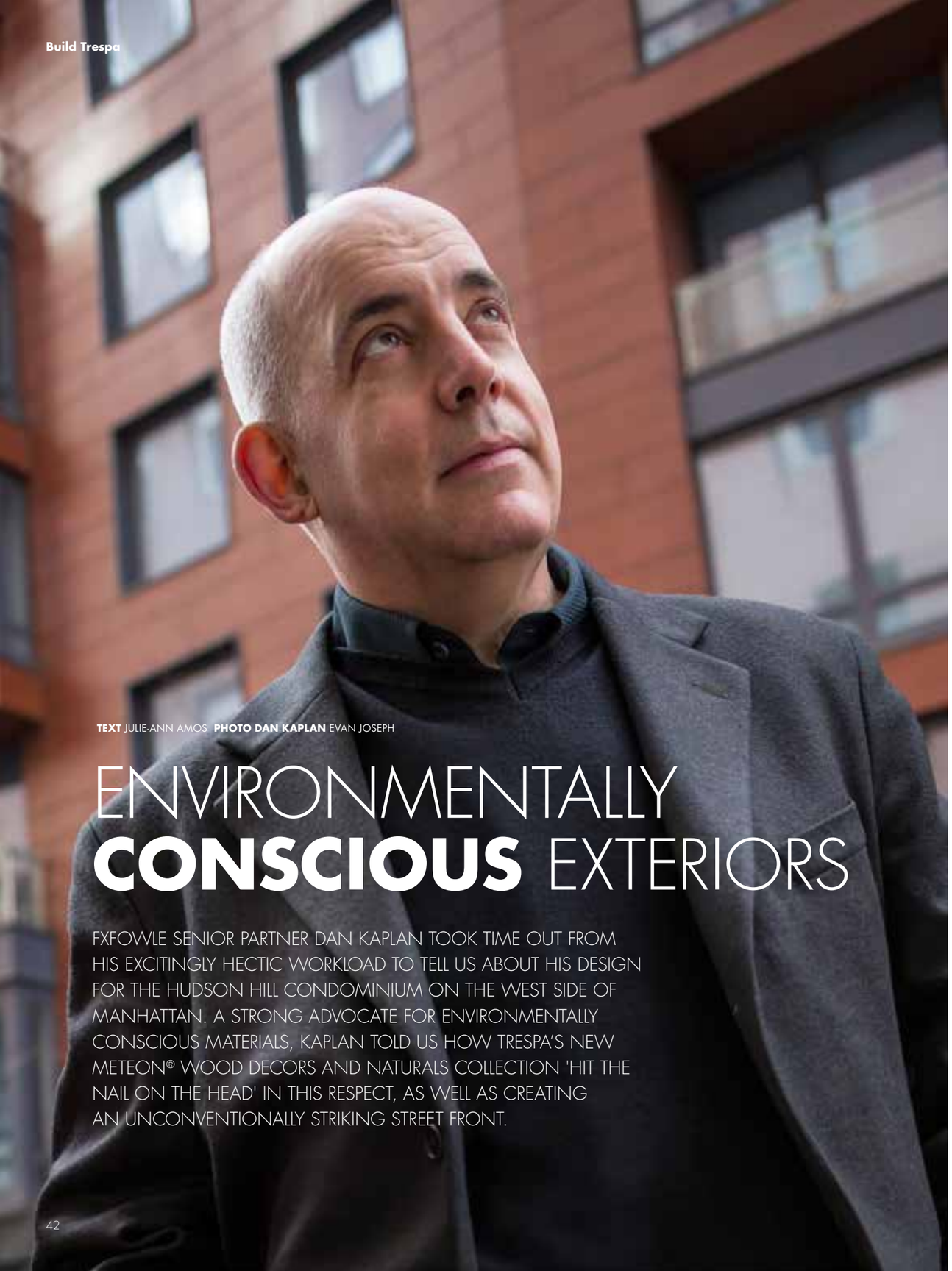
WE GUARANTEE FIXED DELIVERY TIMES PER PRODUCT

Please note that the statements made are valid in normal circumstances.

NEW NATURALS

NA13
SILVER QUARTZITE

AVAILABLE IN MATT FINISH



TEXT JULIE-ANN AMOS **PHOTO DAN KAPLAN** EVAN JOSEPH

ENVIRONMENTALLY **CONSCIOUS** EXTERIORS

FXFOWLE SENIOR PARTNER DAN KAPLAN TOOK TIME OUT FROM HIS EXCITINGLY HECTIC WORKLOAD TO TELL US ABOUT HIS DESIGN FOR THE HUDSON HILL CONDOMINIUM ON THE WEST SIDE OF MANHATTAN. A STRONG ADVOCATE FOR ENVIRONMENTALLY CONSCIOUS MATERIALS, KAPLAN TOLD US HOW TRESPA'S NEW METEON® WOOD DECORS AND NATURALS COLLECTION 'HIT THE NAIL ON THE HEAD' IN THIS RESPECT, AS WELL AS CREATING AN UNCONVENTIONALLY STRIKING STREET FRONT.

"We have been using Trespa® panels for some time now. Our primary focus is designing sustainable buildings in dense urban contexts. Two of our most recent Trespa projects are residential condominiums located in Manhattan – one on the West Side and the other on the Upper East Side. Due to its unique range of colours and textures, Trespa provides some very interesting design choices for urban buildings.

Trespa® products are attractive, both for the sheer variety of colours available and for the finish palette. For mid to high-rise construction, there will always be constraints placed on architectural design in terms of constructability, cost and performance. These three factors form a rigorous filter, frequently leaving the architect with a restricted set of aesthetic options. Fortunately however, Trespa's vast selection provides us with a flexible way of fashioning truly unique façade identities. For example, we constructed the largest wood panel project in Manhattan, with Trespa's help.

Selecting wood allowed us to create a softer intervention within the harder environment. Trespa's new wood finishes will greatly enhance design choice. The new Mahogany colours will be especially useful to us within the clay-red masonry context of Manhattan, and I'm very excited to have so many more choices. Simply put: the more choices, the better.

> "Trespa's new Matt finish will greatly enhance our design choice."
>
> *Dan Kaplan*

New York's dense urban fabric is often defined by the steel and glass buildings that shape its famous skyline. Applying the natural textures provided by Trespa helps to create a definitive contrast to this urban 'roughness' and allows us to work innovatively within the existing environment. For example, on the Hudson Hill project, we used a design conceived as wooden 'folds' that lead the eye away from a hospital immediately opposite the project site and gradually help redirect the viewer across a green park and over to the Hudson River beyond. The new Matt finish has enabled us to further integrate wood panels into an urban-centric palette.

We work hard to create variety within the cityscape that is both sustainable and economic, in addition to being visually compelling. The application of Trespa® panels is a great way to optimise our aesthetic results and leverage the best possible outcomes."

New York, USA

About the Project

ARCHITECT
FXFOWLE ARCHITECTS

PRODUCT
TRESPA® METEON®
WOOD DECORS

NW04

RYSZARD FRANKOWICZ
ARCHITECT

REFURBISHING EXTERIORS

IN CITIES TODAY, THERE ARE MANY RUNDOWN OLDER BUILDINGS THAT ARE LEFT DERELICT DUE TO OUTDATED VENTILATION SYSTEMS AND INEFFICIENT INTERNAL ENVIRONMENTS. ONE SOLUTION IS TO REVISIT THE BUILDING'S EXTERIOR, AS THIS CAN DRAMATICALLY AFFECT ITS PERFORMANCE – AS WELL AS OFFERING A STUNNING NEW LOOK.

Refurbishing the exterior of a building doesn't just revive it aesthetically, a good façade material will add performance and functionality qualities to renew the building's energy credentials and give it a new lease of life.

In this interview, architect Piotr Frankowicz tells us how a ventilated façade system, with Trespa® Meteon® panels, reactivated an existing railway station in Kraków, Poland – not just by giving it a visual facelift, but by making the exterior more durable and economical.

WHY DID THE EXISTING DESIGN NEED TO BE CHANGED EXTERNALLY?
The previous design was based on and executed with the use of the only construction materials available on the market at that time: painted plasterboard, heavy ceramic tile, stone cladding and steel sheets. Their lack of resistance to corrosion and ventilation problems had monumental cost implications. Therefore we needed a solution that would not only fix the current issues but dramatically improve its performance.

WHAT WERE THE DRIVERS BEHIND THE NEW DESIGN?
The main thing was to improve how the façade performed, as the existing one was impossible to maintain. We wanted a simple and clear aesthetic but what was important within this was colour durability.

WHAT STEPS DID YOU TAKE IN YOUR DECISION-MAKING PROCESS?
Considering the importance of the facility as the main railway station in Kraków, it was vital to use high-quality materials corresponding to the monumental surroundings as well as the existing residential and office buildings in the neighbourhood. Hence the colour palette used is simple and natural.

I consulted the urban designer to create the right aesthetic and, due to the fact that this area of the city falls under close historic maintenance, I also consulted a preservationist of the Malopolska region. Both were enthusiastic about the proposed materials and the benefits. The contractor was also a very important part of the process. ▸

Krakow, Poland

About the Project

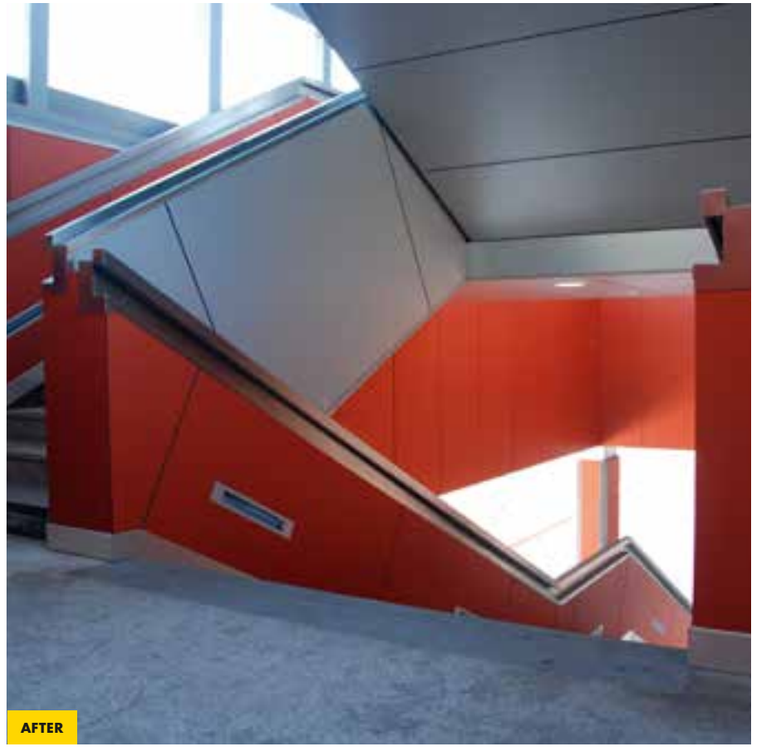
ARCHITECT
RYSZARD FRANKOWICZ
INSTALLER
WIDO-PROFIL
MARKET SEGMENT
RAILWAY
YEAR
2011/2012

PRODUCT
TRESPA® METEON® METALLICS

M51.0.1 M53.0.1 M24.3.3

FINISH
SATIN

FIXING SYSTEM
NON STANDARD



"We needed a solution that would not only fix the current issues but dramatically improve its performance." *Ryszard Frankowicz*

We worked with WIDO-PROFIL, who were familiar with Trespa® panels. They really knew how to work with the materials and performed a professional and precise installation with minimum waste.

WHY WAS TRESPA CHOSEN AS THE MAIN MATERIAL TO REFURBISH THE BUILDING EXTERIOR?
We used Trespa® panels because of their outstanding mechanical properties, material resistance and the wide range of colours available. The choice was also spurred by our positive experience from previous projects where Trespa cladding was used and exceeded our expectations.

Another very important reason was Trespa's assistance at the design and concept stage, providing new ideas for the best end result.

HOW HAVE PEOPLE RESPONDED TO THE REFURBISHMENT?
I am very pleased with people's reactions – what is stressed the most is its modern look, showing a really high aesthetic upgrade that has been compared to many exceptional European and worldwide examples. It's nice to know that people appreciate the upgrade, and for us it was central to improve its functionality and save it from ruin. These buildings are important and were designed with lifelong ambitions – hopefully, we've helped to protect this intention. ▪

Please note that the views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of Trespa International B.V.

"Decisive factors in our choice were ease of product use, its almost unrestricted modulation, quick installation and cleaning."

Santiago G. Mazorriaga

Apartment block in Gorliz (Vizcaya), Spain

About the Project

ARCHITECTS
ARUILUR 3SLP SANTIAGO G. MAZORRIAGA & AITOR UBIRIA
INSTALLER
KOPLAD

PRODUCT
TRESPA® METEON®
UNI COLOURS

A21.1.0 | A90.0.0 | A12.6.3

FINISH
SATIN

"The project required a system that could be installed from the exterior because classes were going to be conducted in the building during the renovation of the facade."

Peter Schlossman

PHOTOGRAPHY MARIUSZ MIZERA

College of DuPage - Berg Instructional Center Glen Ellyn (IL), USA

About the Project

ARCHITECT
LOEBL SCHLOSSMAN & HACKL
INSTALLER
STUCKEY CONSTRUCTION

PRODUCT
TRESPA® METEON®
UNI COLOURS & METALLICS

M51.0.1 | A05.1.1 | A05.1.4 | A06.3.5

FINISH
SATIN

Miabsa Office, Spain

About the Project

OWNER
ELEDER BASURTO
INSTALLER
MIABSA INSTALLERS

PRODUCT
TRESPA® METEON®
UNI COLOURS
AND METALLICS

A12.3.7 M51.0.2 M21.3.4

FINISH
SATIN

REFURBISHING MIABSA

In northern Spain an office building was given a revamp. What's special about this refurbishment is that office owner Miabsa was closely involved in the installation of the new materials and parts, which is quite fitting as the company is itself a design, interior architecture and installation business. "There was added pressure with this refurbishment," said Miabsa. "We're essentially representing what we provide for others, so the design had to be a showcase of up-to-date materials and high-quality installation – it had to be sharp and modern".

Miabsa had a strong vision in mind for its offices when working with the architects: "We wanted to completely transform the old brick building by giving it volume in different areas and distinctive colours and finishes."

> "We needed to make sure that this new experience would be perfect and we had a particular vision in mind – Trespa exceeded our expectations with their product and services."
>
> *Eleder Basurto*

The result is a boxy exterior, where parts of the façade push and pull the building's form. But what adds to the design are the bold colours chosen to re-activate the building – most evident is the red profile which extends from an upper floor window down to the entrance. Miabsa commented that "the most important aspect to consider for the exterior was durability", adding that it wanted to use colours on "a material that would look impressive for many years". ▪

> "For over 20 years we have been successfully using Trespa, we are delighted about the diversity and appreciate the constant innovation and expert support." *Fred Meier*

School in Freilassing, Germany

About the Project

ARCHITECTS
FRED MEIER ARCHITEKTEN
INSTALLER
LOFERER UND TAUSENDFREUND

PRODUCT
TRESPA® METEON®
UNI COLOURS
AND PROJECT COLOURS

A10.1.8 A22.4.4 A05.0.0

FINISH
SATIN

NEW NATURALS

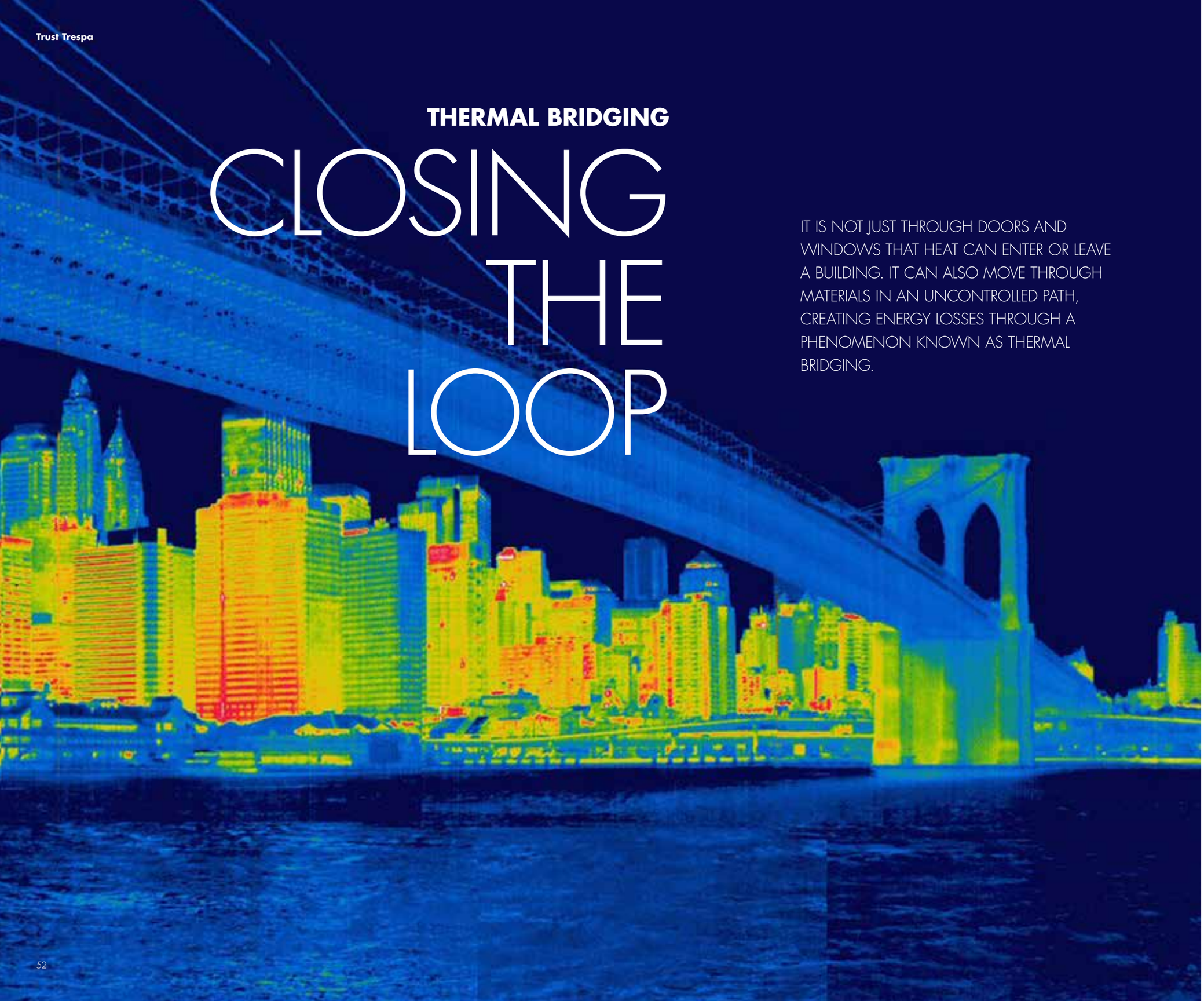
NA12
NATURAL CHALKSTONE

AVAILABLE IN MATT FINISH

NEW NATURALS

NA15
INDIAN TERRA COTTA

AVAILABLE IN MATT FINISH



THERMAL BRIDGING

CLOSING THE LOOP

IT IS NOT JUST THROUGH DOORS AND WINDOWS THAT HEAT CAN ENTER OR LEAVE A BUILDING. IT CAN ALSO MOVE THROUGH MATERIALS IN AN UNCONTROLLED PATH, CREATING ENERGY LOSSES THROUGH A PHENOMENON KNOWN AS THERMAL BRIDGING.

A thermal bridge in the building envelope acts like a 'short circuit' in electronics: it creates an uncontrolled and detrimental 'break' in the insulation layer, leading to inefficient energy transfers. It is therefore vital for architects and contractors to know which materials and methods of construction can reduce these energy losses. There are many points at which heat can stray from its intended path, creating hot and cold spots in unexpected areas. Certain materials and construction combinations can reduce the risks of thermal bridging and so drastically reduce our energy impacts on a local and global level.

BEING RESPONSIBLE FOR OUR ENERGY

Much data has been collected on the relationship between buildings and energy consumption around the globe. There are many variations in these figures, according to continents and types of energy, but one theme is recurring –buildings are responsible for a vast amount of the energy that we use.

Worldwide, buildings represent 32% of the total final energy consumption. In terms of primary energy consumption, buildings represent around 40% in most International Energy Agency countries. Many other studies show similar figures, demonstrating how architecture can be responsible for wider sustainability issues due to the energy used in its making and use.

Learning about our energy use can help to generate ideas to reduce our impacts, and push us to find new methods of using materials and constructing buildings. Understanding the best ways of avoiding thermal weak spots in exterior walls is a case in point. ▸

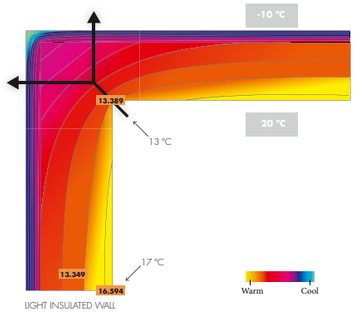


Figure 1
Geometric thermal bridge in the corner of a building.

(source: calculation with Unorm, courtesy of Prof. Anderlind, www.gadbyggnadsfysik.se)

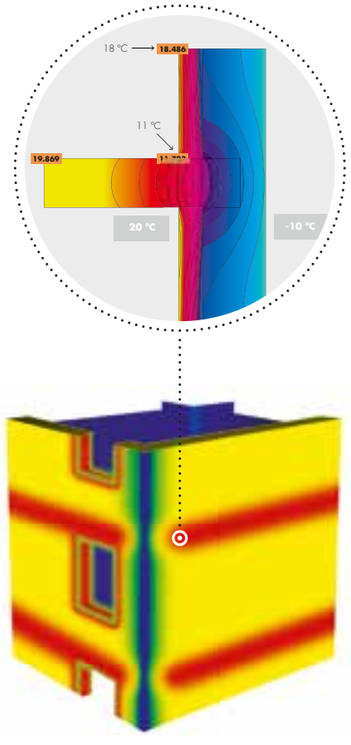


Figure 2
Thermal bridge at wall-floor level. Red is the highest heat flux.

(source: ASIEPI European Project, P188 Good practice guidance on thermal bridges & construction details). (calculation with Unorm, courtesy of Prof. Anderlind, www.gadbyggnadsfysik.se)

> "Learning about our energy use can help to generate ideas to reduce our impacts, and push us to find new methods of using materials and constructing buildings."

THERMAL BRIDGING

There are three types of thermal bridge: geometric, convective and structural.

1. Geometric thermal bridges are caused by the irregular shapes in a building's construction – for example, corners. Here, the outside surface of the structure is larger than the inside, which creates opportunities for heat to escape in two directions *(see figure 1)*. This effect can be seen in isotherm diagrams, where the outside temperature is observed as a more intense colour, while the inside is less vivid, indicating that the surface temperature is lower.
   This situation can also create problems with condensation, ultimately resulting in damp and mould pockets. One solution is to add insulation to the external wall, which will increase the internal wall's surface temperature and, in most cases, prevent local condensation.

2. The second type of thermal bridges – convective – are created by air leakage found in multi-layered construction. Within the glazing cavity of a window, for example, the differences in air pressure can cause local heat loss to occur. Air within the cavity will vary in temperature and according to the window frame material. When the air is warm, it will rise and is replaced by cooler air due to convective currents. This heat transfer, from the inner window frame to the outer frame, can result in heat losses.

3. However, the most common type of thermal bridging is structural, caused by penetrations in the building envelope – especially within the insulation layers – that use materials with high thermal conductivity. These thermal bridges can be seen most prominently at balcony to floor connections *(see figure 2)* and exterior wall to metal subframe connections and are visible as discoloured lines. There are also point-wise structural thermal bridges, where bolts or fastenings from the exterior to the internal wall create opportunities for air to penetrate *(see figure 3b)*.

Thick insulation lowers the heat conductivity and reduces the severity of thermal bridging. However, it also has wide implications in terms of both cost and the building volume, and doesn't offer a permanent solution. Considering methods to prevent thermal bridging at the design and construction phase can assist in reducing loss of energy and the need for these 'add-on' solutions.

SUBFRAMES PLAY A CRITICAL ROLE

The component that carries the cladding material can play a vital role in reducing thermal bridging. In drained and back-ventilated rainscreen cladding systems, for example, the thermal insulation is placed towards the outermost side of the wall, creating a frequent and repetitive thermal bridge *(see figure 3a)*. In addition, if the subframe is made from a highly conductive material, such as aluminium, the effect of this insulation layer will drop due to heat loss or compensation to adjacent materials. A bulge in an isotherm diagram *(see figure 3b)* illustrates this situation. Materials with low thermal conductivity can dramatically reduce thermal bridging – from the frame to the panel, from outside to inside. ▸

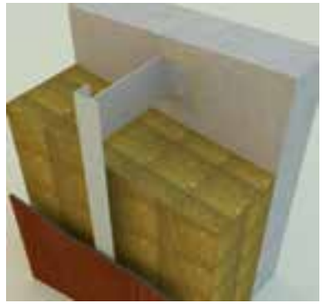


Figure 3a
The sub-frame of drained and back-ventilated rain screen cladding penetrates the outdoor insulation.

(source: Trespa International)

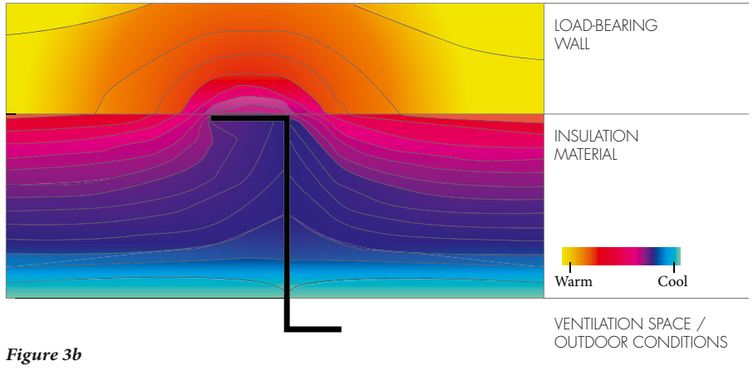


Figure 3b
Thermal bridge effect of a sub-frame profile and wall bracket penetrating the outdoor insulation.

(source: Trespa International, calculation with Unorm, courtesy of Prof. Anderlind, www.gadbyggnadsfysik.se)

Figure 5
WDK Phoenix subframe from Wagner System AG Switzerland.
(Source: Wagner System AG)

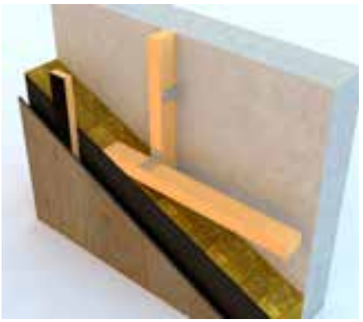


Figure 6
Multi-layered full timber subframe.
(Source: Trespa International)

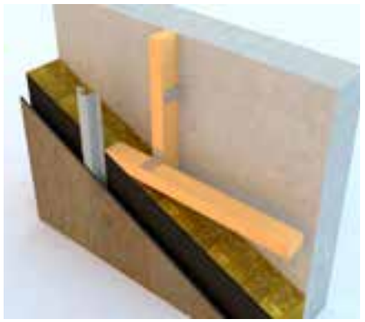


Figure 7
Multi-layered mixed timber subframe where additional metal components are used.
(Source: Trespa International)

MATERIAL MATTERS

As the material used for the subframe affects the extent of the thermal bridge, addressing this element in the design can reduce energy loss at later stages. Aluminium is commonly used due to its lightweight construction, resistance to corrosion and the various configurations made possible by the process of extrusion. Despite these benefits, it also possesses high heat conductivity: 160W/mK, which is 4,000 times that of mineral wool *(see figure 4)*.

MATERIAL	HEAT CONDUCTIVITY λ (W/MK)
Expanded poly Styrene foam	~ 0,035
Mineral wool	***~ 0,04***
Solid PVC	~ 0,09
Plywood 500 kg/m³	~ 0,13
Pine, fir	***~ 0,14***
Glass fibre Reinforced Plastics	~ 0,25 – 0,35
Bricks 1500 kg/m³	~ 0,6
Glass	~ 1
Concrete 1800 kg/m³	~ 1,15
Concrete 2400 kg/m³	~ 2
Stainless steel	***~ 17***
Steel	~ 50
Alloyed aluminium	***~ 160 - 200***

Figure 4
Heat conductivity factors of commonly used building materials.

Stainless steel (17 W/mK) is another option, reducing the conductivity by almost 90% compared with aluminium; however, the cost of the subframe would be compromised significantly. Another alternative is the use of a timber (500kg/m³) subframe, which has a conductivity of 0.14W/mK – less than 1% of that of aluminium. The disadvantage of timber construction, when unprotected, is its combustibility. Because of this, in some countries, building regulations restrict the use of this system to below a certain height.

ELEMENTS TO INTERRUPT THE HEAT FLOW

As well as the main subframe material, other connecting devices can reduce the impact of thermal bridging. Placing less conductive materials in the wall build-up breaks heat losses. 'Thermstops' – a piece of solid PVC or polyamide – have been used in between the load-bearing wall and wall-bracket or console. This method is less effective when thicker insulation – over 140mm, for example – is used. An alternative, in these instances, is to use stainless-steel wall brackets or consoles.

In Switzerland, a widespread solution is to use a wall bracket which partly consists of fibre reinforced plastics *(see figure 5)*. The plastic element assists to block a large amount of heat. This method may require additional fire protection due to its combustible nature and will also require low-combustible insulation material to support its use.

COMBINING TIMBER CAN BREAK THE BRIDGE

Many other combinations exist to fracture the unintended heat flows through external facades. A successful and effective solution to minimise thermal bridging is the use of a multi-layered timber subframe *(see figure 6)*. This has a relatively low heat conductivity and, through placing the beams at a crossing, reduces the contact area. Other advantages are its cost-effectiveness in terms of material and labour. Timber is also a sustainable material and helps to cut CO_2 emissions through its capacity to store energy.

Combined with a metal frame, alternative solutions are possible *(see figure 7)* – and already applied in several countries. The advantage of this 'hybrid' structure is that the timber within the insulation is given additional protection from possible moisture as it is in direct contact with a weather barrier. However, within the cavity, the timber is more exposed and therefore vulnerable to moisture.

By replacing the timber batten with an aluminium profile, this scenario can be avoided. As long as the metal fixtures are placed outside the thermal insulation, their effects on heat flow are negligible, providing yet another solution for architects seeking energy-efficient exteriors. ▪

NEW ENCOUNTERS IN SOUTH AMERICA

STRANGE ENCOUNTERS CAN SOMETIMES LEAD TO INTERESTING OUTCOMES. WHEN TRESPA HEADED TO SOUTH AMERICA IN MAY 2010, IT TRIGGERED NEW RELATIONSHIPS AND MATERIAL OPPORTUNITIES FOR THIS HOT CLIMATE, AND SPARKED A LONG-TERM GOAL TO GET INVOLVED WITH THE ARCHITECTURAL SCENE HERE. TO MARK THIS DEDICATION, A NEW TRESPA DESIGN CENTRE WAS OPENED IN SANTIAGO, CHILE'S CAPITAL, WHICH SEEKS TO CONNECT PEOPLE AND MATERIALS ALL OVER SOUTH AMERICA.

Jose Bento,
manager of Trespa South America

Pablo Larain,
vice president of Architects Office Association

Located next to AOA (Architects Office Association) on Plaza Las Lilas in Santiago, the Trespa Design Centre Santiago was opened in April 2012. It encourages the exchange of ideas and solutions in South America.

It was not just the exciting building boom that encouraged Trespa to come here. It was the challenge to offer a predominantly glass-based architectural exterior market another solution. A conversation with Jose Bento, manager of Trespa South America, and Pablo Larain, vice president of AOA (Architects Office Association), reveals the story behind Trespa's expansion into South America and the opening of the Trespa Design Centre Santiago.

"We really created an impact here." *Jose Bento*

A GAP IN THE MARKET

On arriving in South America, Bento quickly noticed a missed opportunity into the available solutions for architectural exteriors. The European market offers around 40 solutions for different climates and situations, but he could only see about four – on a continent with more extreme temperatures. "It was a surprise that architects opted for glass solutions – the amount of heat collected internally would require increased ventilation costs," says Bento. But, he is quick to add, "Although Trespa is known for its ventilated facades in Europe and the US in particular, no-one knew who we were here and what we could offer".

FIRST IMPACT IN SOUTH AMERICA

Trespa is known for its colourful array of panels and attention to detail and this really comes into play in South America. It was at the Edifica exhibition in Chile where Bento felt that they could expose what the company was about and the product. "We really created an impact here," he says, adding how important it was to design the booth for the exhibition. "It was an opportunity to show how we had a panel with unique technical properties."

MEETING OF MINDS

It was during this exhibition that a key meeting took place: "It was a noteworthy moment for me when I met Jose," says Larain from the AOA – a central organisation responsible for many buildings in South America. "I was wandering around the Edifica exhibition and this particular booth and its materials stood out – brightly coloured panels with lots of people surrounding it." What followed was an interesting exchange of ideas between the two. "Trespa came at a good time. Chile's architectural scene has ▸

An interesting collaboration with the Chilean Architecture Biennale in 2012 saw the construction of a colourful opening for the event. The unusual arrangement of panels spells 'Bienal,' whilst showing how colours can create the impression of dimensionality.

An earthquake in Chile in 2011 provoked the need to remodel Austrian company EGLO's showroom and offices. Needing to reconstruct the building in a short amount of time without compromising quality, a mixture of colours and sizes of Trespa® façade panels were chosen to compliment the glass components in the new design.

"Investors are getting concerned about the use of energy. We have to think of innovative solutions." *Pablo Larain*

been moving in so many ways, from using stucco to aluminum panels. But they were providing something entirely different – a low-cost, high-specification solution and I wanted to be involved," says Larain.

THE START OF THE DESIGN CENTRE CHILE

It was always Trespa's desire to expand its presence in South America and it was soon presented with a great opportunity to build relationships and expose its range of products. Bento says: "I had a meeting with AOA members and they revealed that they were moving to Plaza Las Lilas [in Santiago] and that there was a vacant place next to them. We opened a Trespa Design Centre in April 2012 and I think it was a great move – geographically in terms of Chile but also in its wider context." "Trespa being in Chile shows that they're interested in South American architecture," adds Larain. "Opening a Design Centre means that they're in it for the long run."

CONVERSATIONS CREATE SOLUTIONS

Another great opportunity arose from Bento and Larain's conversations. An office building requiring a sustainable outlook was being designed by Larain and his office. "The design was really made for Trespa," says Bento, "and collaborating with AOA formed an ideal solution – a second skin that would protect the building from direct sunlight in many parts, avoiding overheating, which is a problem in many office buildings in Santiago."

The project, White Vitacura, which is currently leased to Microsoft, required a low-budget solution for the investor – but without compromising on design and energy concerns. Larain says: "Investors are getting concerned about the use of energy, as we don't have it – we have to get our gas from Indonesia! We have to think of innovative solutions for our needs." Trespa and AOA created a solution that was technically appropriate and also aesthetically interesting – appearing as waves of glass and white panels.

EVENTS TO STIMULATE RELATIONSHIPS

As well as inspiring new building solutions, the Trespa Design Centre holds many events that contribute to innovative ideas. One of the most notable was AOA's magazine launch, which attracted over 200 people.

Trespa was also involved with the Chilean Biennale in 2012. Trespa worked with the Architects Association in Chile and architect Sebastian Grey, the Biennale curator that year, to come up with the idea for a colourful, inviting structure at the entrance of the event. "It was a great project to be a part of and really made a bold statement about our product and its energy," says Bento.

CREATING A NETWORK BY SHARING EXPERIENCES

A mixture of informal and formal encounters have started a web of possibilities for Trespa and architecture in South America. "Here, things are more personal," says Bento. "Businesses follow the same model as family life – movement, conversations, grabbing a coffee or some food, bumping into each other on the street. What can result are moments that create opportunities and solutions."

"We are now in our second phase in South America. We have built confidence in our product and started working with architects in Chile, Peru, Argentina, Uruguay, Brazil and Columbia. We're now at the stage where we can look into more innovative material solutions for individual projects, like we did with White Vitacura. We want Trespa to be associated with architecture here, not just providing our product, but sharing our wealth of knowledge and our thirst for innovation. Fingers crossed, the exchange of materials will open up more in South America and offer greater options for architects."

Working with AOA, Trespa designed an innovative façade solution for a project called White Vitacura. The building mixes glass and Trespa® panels to create an energy-conscious, low-budget exterior.

THE GRAND MAYAN WORLD MUSEUM

WRAPPED IN MAYAN CULTURE

THE CURVACEOUS FORM OF THIS MUSEUM OF MAYAN CIVILISATION LOOKS LIKE A NEST, WITH INTERWEAVING GREEN BANDS THAT APPEAR TO HOLD THE GLASS AGAINST THE STEEL STRUCTURE. BUT THE COLOURED STRIPS ARE NOT FOR STRUCTURAL AID – LIKENED BY THE ARCHITECTS TO SPREADING BRANCHES, THEY ARE INTENDED TO SYMBOLISE THE CEIBA, A SACRED TREE IN YUCATÁN STATE.

THIS IS NOT THE ONLY USE OF METAPHOR IN THE DESIGN – OUTSIDE, A BOTANICAL GARDEN LINKS BACK TO THE CEIBA AND ANGLED ENTRANCE STEPS EVOKE MAYAN PYRAMIDS.

Mérida, Mexico

About the Project

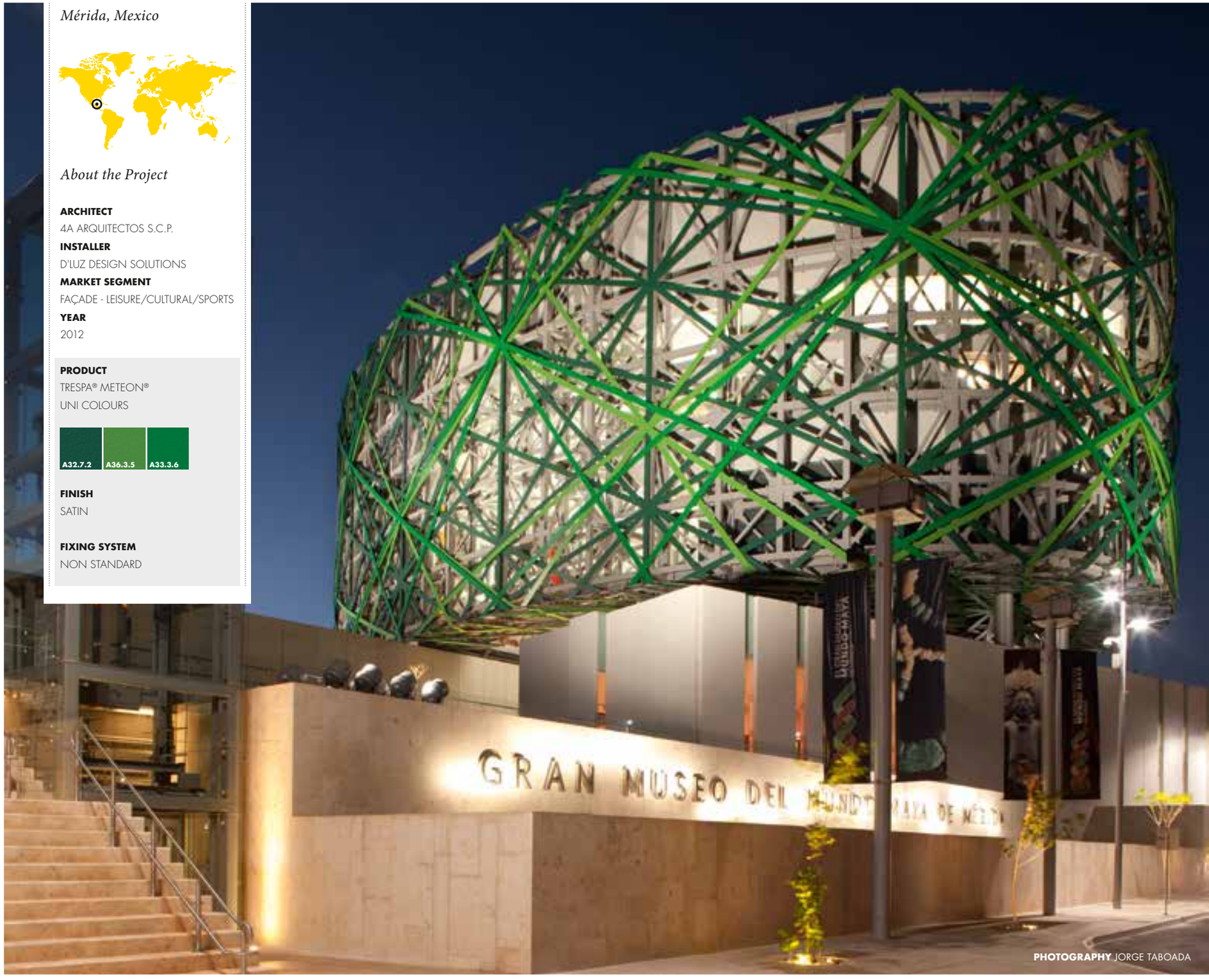
ARCHITECT
4A ARQUITECTOS S.C.P.
INSTALLER
D'LUZ DESIGN SOLUTIONS
MARKET SEGMENT
FAÇADE - LEISURE/CULTURAL/SPORTS
YEAR
2012

PRODUCT
TRESPA® METEON®
UNI COLOURS

A32.7.2 A36.3.5 A33.3.6

FINISH
SATIN

FIXING SYSTEM
NON STANDARD



PHOTOGRAPHY JORGE TABOADA

DESIGN CENTRE **BARCELONA**

MEET, IMAGINE, EXPERIENCE

The Trespa Design Centres offer a unique environment to showcase design-related programming. Available to the design community and visitors, the spaces encourage meeting, learning and networking – they are centres to inspire new solutions and interactions in design.

Trespa invites architects, contractors, students and others interested in design innovation to experience a mixture of formal and informal opportunities – whether to have a coffee and take a look around, discussing the ins and outs of material possibilities, or for more formal consultations about specific Trespa products at any stage in the design process.

FOR MORE
INFORMATION AND
THE LATEST EVENTS:
TRESPA.COM/TDC

DESIGN CENTRE **NEW YORK**

VISIT US AT
62 GREENE STREET (GROUND FLOOR)
NEW YORK, NY 10012, USA
TEL: +1 212 334 6888
TDC.NEWYORK@TRESPA.COM

OPENING HOURS
MONDAY - FRIDAY 10.00 - 17.00

DESIGN CENTRE **BARCELONA**

VISIT US AT
CALLE RIBERA 5
08003 BARCELONA, SPAIN
TEL: +34 (0) 93 295 4193
TDC.BARCELONA@TRESPA.COM

OPENING HOURS
MONDAY - THURSDAY 9.00 - 14.00 | 15.00 - 18.00
FRIDAY 9.00 - 13.00 | 15.00 - 18.00

DESIGN CENTRE **SANTIAGO**

VISIT US AT
ELIODORO YÁÑEZ 2831
TORRE A - LOCAL 1
PROVIDENCIA, SANTIAGO, CHILE
TEL: +56 2 4069990
TDC.SANTIAGO@TRESPA.COM

OPENING HOURS
MONDAY - FRIDAY 9.00 - 14.00 | 15.00 - 18.00

NEW WOOD DECORS

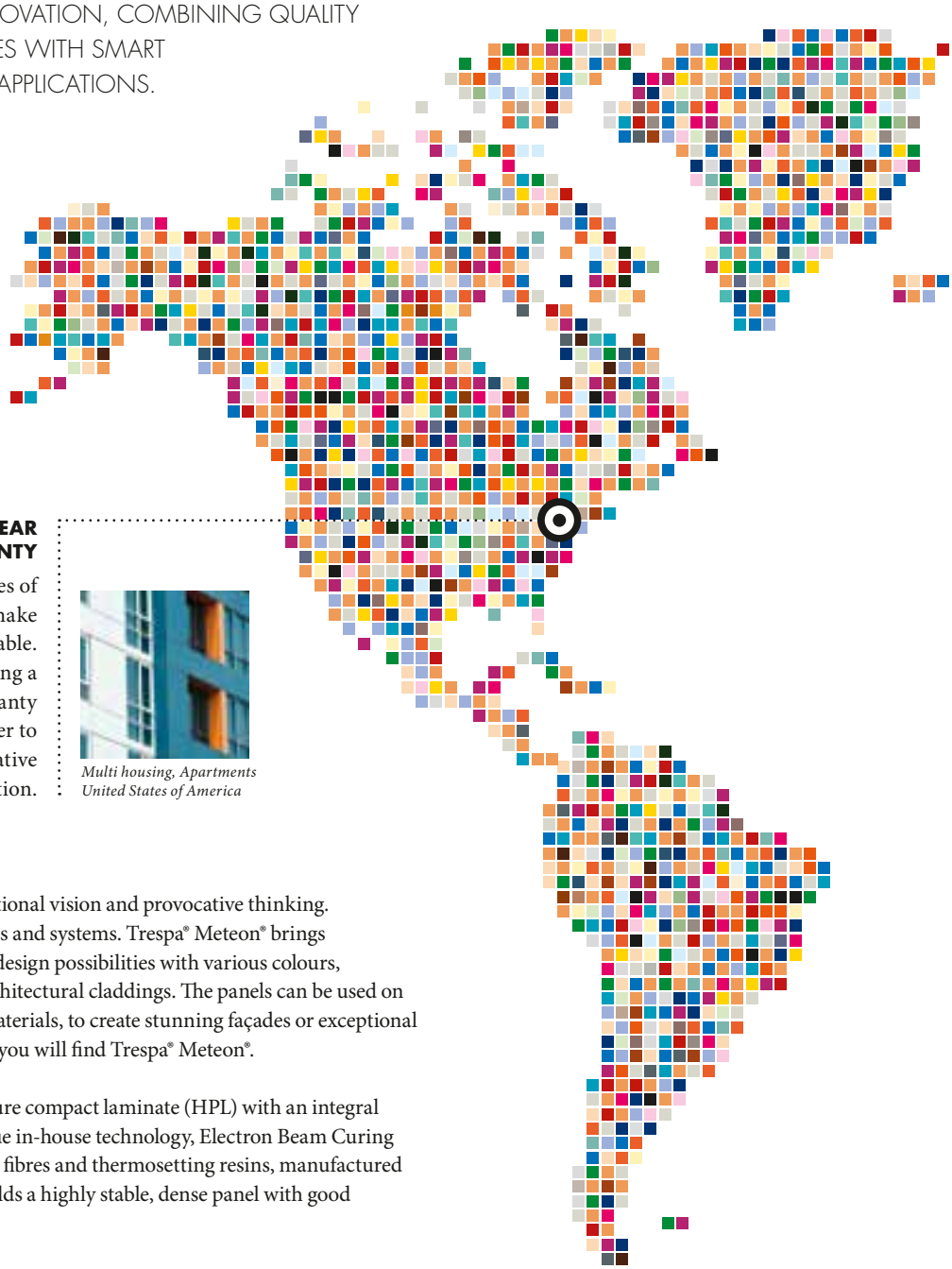
NW22
SLATE WOOD

ALSO AVAILABLE IN MATT FINISH

TRESPA® METEON®

COLOURING THE WORLD

TRESPA INTERNATIONAL B.V. IS A LEADING INNOVATOR IN THE FIELD OF ARCHITECTURAL MATERIALS, RECOGNISED INTERNATIONALLY AS A PREMIER DEVELOPER OF HIGH QUALITY PANELS FOR EXTERIOR CLADDING AND DECORATIVE FAÇADES. SINCE ITS FOUNDING IN 1960, TRESPA HAS WORKED CLOSELY WITH ARCHITECTS, DESIGNERS, INSTALLERS, DISTRIBUTORS AND END USERS GLOBALLY. TRESPA BELIEVES IN PRODUCT INNOVATION, COMBINING QUALITY MANUFACTURING TECHNOLOGIES WITH SMART SOLUTIONS FOR ARCHITECTURAL APPLICATIONS.



10-YEAR PRODUCT WARRANTY

The unique properties of Trespa® Meteon® panels make them highly durable. That's why Trespa is offering a ten year conditional warranty on its product. Please refer to your local sales representative for more information.

Multi housing, Apartments
United States of America

WHERE CONCEPT MEETS SOLUTION

Good design starts with inspiration, exceptional vision and provocative thinking. It comes to life with great materials, finishes and systems. Trespa® Meteon® brings compelling aesthetics and nearly limitless design possibilities with various colours, rhythms and depths to next-generation architectural claddings. The panels can be used on their own, or in combination with other materials, to create stunning façades or exceptional highlights. Where concept meets solution, you will find Trespa® Meteon®.

Trespa® Meteon® is a decorative high-pressure compact laminate (HPL) with an integral surface manufactured using Trespa's unique in-house technology, Electron Beam Curing (EBC). The blend of up to 70% wood-based fibres and thermosetting resins, manufactured under high pressures and temperatures yields a highly stable, dense panel with good strength-to-weight ratios.

Trespa® Meteon® stands out in vertical exterior wall coverings such as façade cladding, balcony panelling, sunblinds as well as horizontal exterior ceiling applications.

UNI COLOURS

A05.0.0 Pure White	A04.0.0 Cream White	A05.1.0 Papyrus White	A05.1.1 Stone Beige	A08.2.1 Mid Beige	A08.3.1 Stone Grey	A06.7.1 Natural Greige	A08.8.1 Dark Brown
A03.0.0 White	A04.0.1 Pearl Yellow	A07.1.1 Sand	A08.2.3 Salmon	A10.3.4 Terra Cotta	A11.4.4 English Red	A10.4.5 Sienna Brown	A14.7.2 Deep Red Brown
A03.1.0 Pastel Grey	A04.0.2 Pale Yellow	A05.1.2 Champagne	A05.1.4 Sun Yellow	A06.3.5 Ochre	A08.4.5 Rusty Red	A09.6.4 Mahogany Red	A12.6.3 Wine Red
A35.4.0 Cactus Green	A37.2.3 Spring Green	A41.0.6 Mojito Green	A04.0.5 Zinc Yellow	A04.1.7 Gold Yellow	A10.1.8 Red Orange	A12.1.8 Passion Red	A12.3.7 Carmine Red
A33.3.6 Brilliant Green	A36.3.5 Turf Green	A37.0.8 Lime Green	A32.2.1 Translucent Green	A21.1.0 Winter Grey	A24.4.1 Steel Blue	A20.5.2 Lavender Blue	A17.3.5 Cyclam
A34.8.1 Forest Green	A32.7.2 Dark Green	A30.3.2 Verdigris	A22.2.1 Bluish Grey	A28.6.2 Mid Green	A26.5.4 Pacific	A22.4.4 Brilliant Blue	A20.2.3 Light Viola
A25.8.1 Anthracite Grey	A21.7.0 Steel Grey	A28.2.1 Aquamarine	A22.3.1 Ocean Grey	A22.2.4 Powder Blue	A22.1.6 Royal Blue	A21.5.4 Cobalt Blue	A22.6.2 Dark Denim
A11.8.0 Ceramic Greige	A05.5.0 Quartz Grey	A21.5.1 Mid Grey	A03.4.0 Silver Grey	A24.0.3 Polar Blue	A23.0.4 Mineral Blue	A20.7.2 Dark Blue	A90.0.0 Black
A06.5.1 Toscana Greige	A10.6.1 Taupe	A16.5.1 Mauve					

PROJECT COLOURS

COLOUR YOUR IMAGINATION

Trespa® Meteon® architectural panels are available in a wide choice of standard colours and effects. To create façades that are even more individual and expressive, Trespa® Meteon® panels can be custom-made in special project colours. For more information please contact your local Trespa representative.

METALLICS

M35.7.1 Malachite Green	M51.0.1 Aluminium Grey	M20.4.2 Northern Light	M24.3.3 Lagoon	M06.4.1 Amber	M05.5.1 Titanium Bronze	M04.4.1 Titanium Silver
M21.8.1 Graphite Grey	M51.0.2 Urban Grey	M21.3.4 Azurite Blue	M34.3.1 Bottle Green	M40.4.3 Mustard Yellow	M53.0.2 Copper Yellow	M53.0.1 Copper Red
						M12.4.2 Garnet Red

Trespa® Meteon® Metallics panels feature a directional coloured surface.

WOOD DECORS

NW01 Loft Grey	NW02 Elegant Oak	NW03 Harmony Oak	NW04 Pacific Board	NW05 Loft Brown	NW06 Montreux Amber	NW07 Montreux Sunglow	NW08 Italian Walnut
NW09 Wenge	NW10 English Cherry	NW11 Santos Palisander	NW12 Natural Bagenda	NW13 Country Wood	NW14 French Walnut	NW15 Milano Sabbia	NW16 Milano Terra
NW17 Milano Grigio	NEW NW18 Light Mahogany	NEW NW19 Dark Mahogany	NEW NW20 Bleached Pine	NEW NW21 Australian Pine	NEW NW22 Slate Wood	NEW NW23 Nordic Black	

Trespa® Meteon® Wood Decors panels feature a directional coloured surface. The grain of Trespa® Meteon® Wood Decors runs the length direction of the panel.

NATURALS

NA05 Erosion	NA06 Patina	NA07 Deep Blue	NA08 Sierra Red	NA09 Oxidation	NA10 Titanic
NEW NA11 French Limestone	NEW NA12 Natural Chalkstone	NEW NA13 Silver Quartzite	NEW NA14 Weathered Basalt	NEW NA15 Indian Terra Cotta	

Trespa® Meteon® Naturals panels feature a directional coloured surface.

SIZES

4270 x 2130 mm (≈ 168 x 83 inch)	3650 x 1860 mm (≈ 143 x 73 inch)	2550 x 1860 mm (≈ 100 x 73 inch)	3050 x 1530 mm (≈ 120 x 60 inch)

The large size of this panel allows an efficient machining of the product.

Note: Full size panels feature a squareness tolerance. Please check the Material Property Datasheet for detailed information.

THICKNESSES

6 mm (≈ 1/4 inch)
8 mm (≈ 5/16 inch)
10 mm (≈ 3/8 inch)
13 mm (≈ 1/2 inch)

UNI COLOURS

Colour code	Colour name	Satin				Rock		Gloss
A03.0.0	White	■				■		■
A03.1.0	Pastel Grey	■				■		
A03.4.0	Silver Grey	■				■		■
A04.0.0	Cream White	■				■		
A04.0.1	Pearl Yellow	■				■		
A04.0.2	Pale Yellow	■				■		
A04.0.5	Zinc Yellow	■				■		
A04.1.7	Gold Yellow	■				■		
A05.0.0	Pure White	■				■		■
A05.1.0	Papyrus White	■				■		
A05.1.1	Stone Beige	■				■		■
A05.1.2	Champagne	■				■		■
A05.1.4	Sun Yellow	■				■		
A05.5.0	Quartz Grey	■				■		
A06.3.5	Ochre	■				■		
A06.5.1	Toscana Greige	■				■		
A06.7.1	Natural Greige	■				■		
A07.1.1	Sand	■				■		
A08.2.1	Mid Beige	■				■		
A08.2.3	Salmon	■				■		
A08.3.1	Stone Grey	■				■		
A08.4.5	Rusty Red	■				■		
A08.8.1	Dark Brown	■				■		
A09.6.4	Mahogany Red	■				■		
A10.1.8	Red Orange	■				■		
A10.3.4	Terra Cotta	■				■		
A10.4.5	Sienna Brown	■				■		
A10.6.1	Taupe	■				■		
A11.4.4	English Red	■				■		
A11.8.0	Ceramic Greige	■				■		
A12.1.8	Passion Red	■				■		
A12.3.7	Carmine Red	■				■		
A12.6.3	Wine Red	■				■		■
A14.7.2	Deep Red Brown	■				■		
A16.5.1	Mauve	■				■		
A17.3.5	Cyclam	■				■		
A20.2.3	Light Viola	■				■		
A20.5.2	Lavender Blue	■				■		
A20.7.2	Dark Blue	■				■		■
A21.1.0	Winter Grey	■				■		
A21.5.1	Mid Grey	■				■		■
A21.5.4	Cobalt Blue	■				■		
A21.7.0	Steel Grey	■				■		■
A22.1.6	Royal Blue	■				■		
A22.2.1	Bluish Grey	■				■		
A22.2.4	Powder Blue	■				■		
A22.3.1	Ocean Grey	■				■		
A22.4.4	Brilliant Blue	■				■		
A22.6.2	Dark Denim	■				■		
A23.0.4	Mineral Blue	■				■		
A24.0.3	Polar Blue	■				■		
A24.4.1	Steel Blue	■				■		■
A25.8.1	Anthracite Grey	■				■		■
A26.5.4	Pacific	■				■		
A28.2.1	Aquamarine	■				■		■
A28.6.2	Mid Green	■				■		
A30.3.2	Verdigris	■				■		
A32.2.1	Translucent Green	■				■		
A32.7.2	Dark Green	■				■		■
A33.3.6	Brilliant Green	■				■		
A34.8.1	Forest Green	■				■		
A35.4.0	Cactus Green	■				■		
A36.3.5	Turf Green	■				■		
A37.0.8	Lime Green	■				■		
A37.2.3	Spring Green	■				■		
A41.0.6	Mojito Green	■				■		
A90.0.0	Black	■				■		■

*For available sheet sizes and thicknesses for the above finishes, please check **trespa.info** for the detailed and up to date Delivery Programme and Material Property Datasheet. Alternatively you can use the Product Selector on **trespa.com** (after choosing the country where the project is located).*

METALLICS

Colour code	Colour name	Satin			Rock		Gloss
M04.4.1	Titanium Silver	■			■		
M05.5.1	Titanium Bronze	■			■		
M06.4.1	Amber	■			■		
M12.4.2	Garnet Red	■			■		■
M20.4.2	Northern Light	■			■		
M21.3.4	Azurite Blue	■			■		■
M21.8.1	Graphite Grey	■			■		■
M24.3.3	Lagoon	■			■		
M34.3.1	Bottle Green	■			■		
M35.7.1	Malachite Green	■			■		■
M40.4.3	Mustard Yellow	■			■		
M51.0.1	Aluminium Grey	■			■		■
M51.0.2	Urban Grey	■			■		
M53.0.1	Copper Red	■			■		■
M53.0.2	Copper Yellow	■			■		■

WOOD DECORS

Colour code	Colour name	Satin		Matt	
NW01	Loft Grey	■		■	
NW02	Elegant Oak	■		■	
NW03	Harmony Oak	■			
NW04	Pacific Board	■		■	
NW05	Loft Brown	■		■	
NW06	Montreux Amber	■			
NW07	Montreux Sunglow	■			
NW08	Italian Walnut	■		■	
NW09	Wenge	■		■	
NW10	English Cherry	■			
NW11	Santos Palisander	■			
NW12	Natural Bagenda	■			
NW13	Country Wood	■			
NW14	French Walnut	■		■	
NW15	Milano Sabbia	■			
NW16	Milano Terra	■		■	
NW17	Milano Grigio	■		■	
NW18	Light Mahogany	■			
NW19	Dark Mahogany	■			
NW20	Bleached Pine	■		■	
NW21	Australian Pine	■		■	
NW22	Slate Wood	■		■	
NW23	Nordic Black	■		■	

NATURALS

Colour code	Colour name	Matt	
NA05	Erosion	■	
NA06	Patina	■	
NA07	Deep Blue	■	
NA08	Sierra Red	■	
NA09	Oxidation	■	
NA10	Titanic	■	
NA11	French Limestone	■	
NA12	Natural Chalkstone	■	
NA13	Silver Quartzite	■	
NA14	Weathered Basalt	■	
NA15	Indian Terra Cotta	■	

FINISHES

TYPES

- SINGLE SIDED DECORATIVE: decorative side with non decorative black reverse
- DOUBLE SIDED DECORATIVE: same colour for front and reverse side of the panel
- VARITOP: decorative side with standard white decorative Satin reverse (A03.0.0)
- DUOCOLOUR: different colour for front and reverse side of the panel

VENTILATED FAÇADES

Trespa® Meteon® panels are perfect for use in innovative and functional ventilated façade systems. Used on its own or as a highlight in combination with other materials, Trespa® Meteon® determines the look and underlines the qualities of a building.

Trespa is at the forefront of cutting-edge building techniques. Ventilated façades are more than a design gesture - they may provide energy efficient, long-lasting properties.

ADVANTAGES OF VENTILATED FAÇADE SYSTEMS

- A continuous airflow draws air through the cavity, aiding in the removal of heat and moisture from rain or condensation.
- The rainscreen also blocks parts of the solar radiation and accommodates continuous insulation, which may improve the overall energy performance of the building.
- Residents and users not only find themselves in a low-maintenance-environment, but the dry and comfortable conditions of the building may also have a positive contribution to the indoor environment.

STRONG FOCUS ON SERVICE

As specialist in exterior cladding, Trespa provides knowledge and technical information to aid the design and construction of panelled façades. During all phases of a project, from design and specification to installation, Trespa has a strong focus on service and can provide answers and information to support customers.

Trespa is fully aware that architects wish to realise their specific design going beyond standard solutions. Many customised façades can be realised by offering specific services, especially where Trespa is involved in the early design stage, to give customers detailed advice.

SOLUTION PROVIDING AND VALUE ADDING SERVICES

- **PRODUCT TRAINING SESSIONS**
  Trespa provides training sessions for both installers and designers on topics such as the ventilated façade concept and installation, and product properties and features.
- **TECHNICAL SUPPORT**
  Trespa can guide its partners to achieve optimal technical solutions with appropriate fixing systems.
- **INSTRUCTIONS FOR PANEL HANDLING AND MACHINING**
  High aesthetical quality requires craftsmanship, the right tools and equipment. Trespa will gladly provide advice on these areas.
- **DESIGN SUPPORT**
  Trespa Studio, a multidisciplinary group working on innovative solutions, supporting architects in façade design and offering a special "graphics on façades" service (only available for selected countries), that creates unique images with a random repeat (patent pending).
- **DESIGN CENTRES**
  Trespa Design Centres are based in New York, Barcelona, Santiago de Chile and Weert (the Netherlands). These are unique collaborative spaces inspiring architects, installers and clients. These Centres offer conferences and seminars that facilitate meaningful dialogues with Trespa's partners.
- **INTERNATIONAL CUSTOMER SUPPORT SERVICE**
  Trespa Customer Service Desk is available throughout all the regions in which the company is active.
- **CUSTOM MADE SOLUTIONS**
  Through intensive dialogue with architects and by offering Trespa's customized colours (for projects over 200m² (~ 2,153 ft²)), Trespa has contributed to the realisation of many unique façade designs. These bespoke façade designs are not only beautiful, but also cost effective.

Public Building | France

COMMITTED TO SAFETY

Trespa is committed to the safety of its processes and products. Two classes of Trespa® Meteon® are available: Standard grade (ST) and enhanced Fire-Retardant grade (FR).Please contact your local Trespa representative for local availability.

LOW MAINTENANCE & EASY TO CLEAN

The closed surface of Trespa® Meteon® practically withstands dirt accumulation, keeping the product smooth and easy to clean.

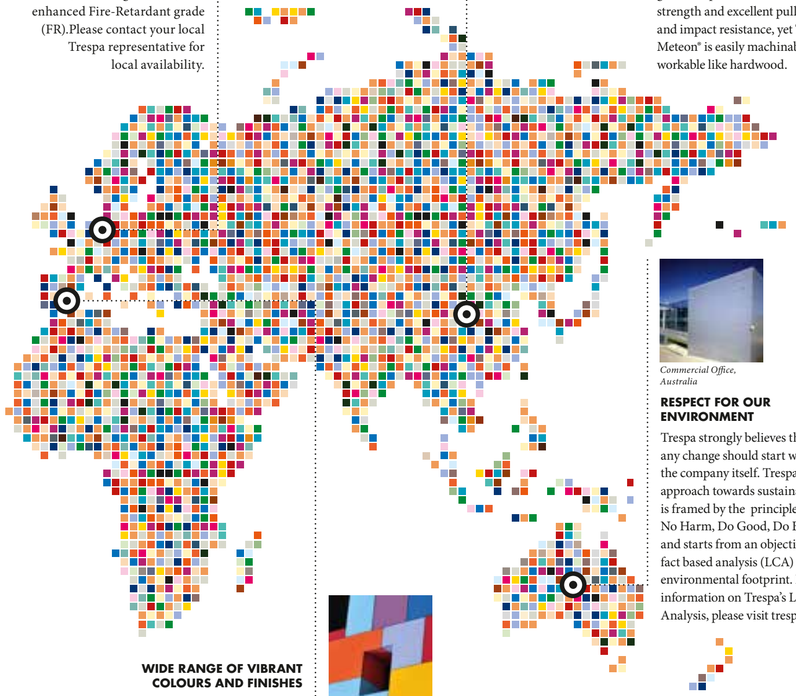
LONG LIFE PERFORMANCE

Trespa® Meteon® is ideal for prolonged exposure as it stays looking great for many years and needs little maintenance. Trespa® Meteon® remains the material of choice for architects today, because they can be sure that it will still define the urban landscape tomorrow.

Education, China

SOLID & STURDY

Consistent and high-density throughout, Trespa® Meteon® holds screws and other mechanical fixings solidly. The panels have good compressive and tensile strength and excellent pullout and impact resistance, yet Trespa® Meteon® is easily machinable and workable like hardwood.



Commercial Office, Australia

RESPECT FOR OUR ENVIRONMENT

Trespa strongly believes that any change should start with the company itself. Trespa's approach towards sustainability is framed by the principle 'Do No Harm, Do Good, Do Better' and starts from an objective and fact based analysis (LCA) of its environmental footprint. For more information on Trespa's Life Cycle Analysis, please visit trespa.com.

Leisure, Cultural, Sports Spain

WIDE RANGE OF VIBRANT COLOURS AND FINISHES

Trespa® Meteon® is at the forefront of attractive design and architecture. The product is available in many standard colours and finishes and even custom-made project colours. The acclaimed Naturals and Wood Decors collections offer a wide range of wood grains and organic motifs.

WEATHER RESISTANT & COLOUR STABILITY

Trespa® Meteon® performs exceptionally well outdoors. Sun and rain will have no significant effect on the panel's surface.

TRESPA®

NEXT ISSUE

CREATING **UNIQUE IDENTITIES**

A range of project colours and patterns can offer investors, architects and contractors a unique solution to brand their organisations.

A VISION ON DESIGN: **PIET BOON**

A look into the decisions behind renowned designer Piet Boon's new Headquarters, based in The Netherlands. Boon created a lace pattern design to distinguish his building. Alternating the pattern, which hangs seamlessly, with glass panels offers an interesting graphical design solution.

TESTING WEATHERING AND COLOUR STABILITY

Façades must exhibit durability against possible weathering. A good quality material will reveal this strength through testing and technological methods. More about Trespa weathering and colour stability in the next issue.

TRESPA DESIGN CENTRE **BARCELONA**

Situated within a vibrant neighbourhood and close to the Official College of Architects of Cataluña, Trespa Design Centre Barcelona attracts a diverse group of industry experts and students who participate in unique architectural workshops.

FIND OUT MORE IN THE NEXT ISSUE SPRING 2014

Colophon

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TRESPA INTERNATIONAL B.V.
WETERING 20
6002 SM WEERT
TEL: +31 (0) 495 45 83 58
FAX: +31 (0) 495 45 85 70
THINKTRESPA@TRESPA.COM

EDITORIAL
EDITOR IN CHIEF:
PARVINDER MARWAHA

CONTRIBUTING EDITORS
SARA SEDDON KILBINGER
JULIE-ANN AMOS

CONTRIBUTING PHOTOGRAPHERS
JELMER DE HAAS
THEA VAN DEN HEUVEL
EVAN JOSEPH
PIERRE PICHON
JORGET ABOADA
TRESPA PHOTOGRAPHY ARCHIVE

GRAPHIC DESIGN & PRODUCTION
CRECS CONCEPT & CREATION
WWW.CRECS.NL

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GRAPHICS

FIND OUT MORE IN THE NEXT ISSUE

"They say a picture is worth a thousand words. With Trespa Graphics it's possible to create façades with a personal touch to a building's context, creating a unique external identity."

Anthony Verrienti,
Façade Advisor, Belgium & Luxembourg

NOTE Trespa® Meteon® Graphics: availability is limited – contact your local Trespa® representative for more details.