



THE ART OF CONCRETE

METEN
stein+design



Hildegard und Dr. Michael Metten

The art of concrete.

Creativity can flower out in concrete. It's an amazing material. We have specialised in the development and production of extraordinary and innovative concrete blocks.

Brothers Peter and Josef Metten established the company as a construction material wholesaler more than 75 years ago. Through the decades and now spanning three generations, our company has grown and evolved into the one based today here at the Overath site. Continuous research and further development have led and are still leading to innovations – innovations which have given and continue to give momentum to the industry, and which are now in use throughout the world.

Dr. Michael Metten

The image shows a dimly lit industrial factory interior. The scene is dominated by a complex network of metal beams, pipes, and machinery. In the foreground, a wheelbarrow is visible on the floor. The entire image is overlaid with a semi-transparent red gradient. The word "COMPANY" is written in a white, sans-serif font in the upper right quadrant of the image.

COMPANY

In
many
respects
a kind of
gemstone.



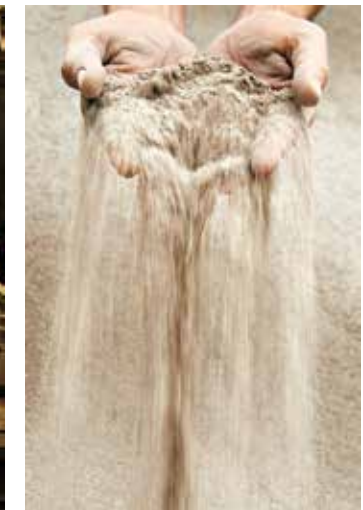
The METTEN Stein+Design laboratory applies extremely strict quality criteria when selecting the coloured natural sands and natural stone chip-pings from the nearly inexhaustible quantity of aggregates. The specific properties of those materials complement one another in complex formulas to achieve outstanding METTEN stone quality.

The company developed the different manufacturing processes, some of which hold international patents, over the course of several generations. With the MQ1 quality assurance system, we have established our own quality standards which go far beyond the European quality guidelines.

Furthermore, we are able with our laboratories, our knowhow and our engineers to develop customized products for your market after predefining the development target.



Quality assurance through precise process technology and controls.



Coloured natural sands and high-quality pigments guarantee outstanding colour fastness.

One
of the
first METTEN
innovations.



The company METTEN was founded more than 75 years ago, we are producing concrete blocks for more than 60 years and we have specialized in developing and manufacturing exceptional concrete blocks for 25 years. Through this focusing, we have developed a unique technology competence over the years.

Good ideas succeed. Half a stone, half a lawn - the benefits of this idea are obvious. The grass paving block, invented by Josef Metten in the 60s, is still used a million times worldwide. At that time he laid the foundation for the METTEN research department. From this a large number of patented innovations were developed.

The mechanical production of the washed concrete slab and the CleanTop®-technology are just two more examples of many ideas. Today, in more than 25 countries licensee are still producing according to patents which have been developed in Overath.



Inspired by the wrought-iron lattice in the Altenberg Cathedral, the world famous grass paving block was invented by Josef Metten.

Because of their innovations and their design, METTEN products were honored with renowned, international design awards.



The Metten CleanTop system.



To fulfill the demands of our customers is our motivation to create unique solutions and products. And the demand for „easy to maintain“ products is growing. 15 years ago, we stopped using sealers or impregnations for our products, having a system ready to start after two years of development together with a university. The aim of the new system is to create a more durable and better effect compared to impregnated or sealed pavers. The attributes are created in the manufacturing process.

Today we distinguish between three different levels of CleanTop®. Each level is offering its own properties. We have the CleanFactors CF 90 (Basic protection), CF 100 (Premium protection) and CF 120 (Best protection – only for Belpasso®).

With that, we are able to offer very different surfaces, e.g. shot blasted, ground, structured, washed surface etc. combined with a CleanTop® protection.

For your marketing strategy: The CleanTop® system offers unique selling points to differentiate from competitive products. If you are interested in having other products with CleanTop®, a CleanTop® license could be the way. CleanTop® can be used for existing products as well as for new products from the METTEN range.

THE CLEANTOP® TEST

In order to visibly demonstrate the low maintenance of a CleanTop® surface, used oil, red wine, coffee, ketchup and mustard were spread on a CleanTop®-pro-

tected paving stone and on an unprotected paving stone and left for several hours. Afterwards the stains were cleaned with soapy water and a brush. Result: slight re-

sidue of used oil, otherwise problem-free removal of all stains from the CleanTop®-protected paving stone; residues on the unprotected paving stone.



La Linia with CleanTop® prior to cleaning.



La Linia with CleanTop® after cleaning.



La Linia without CleanTop® after cleaning.

Solid stage
for the joy
of living.



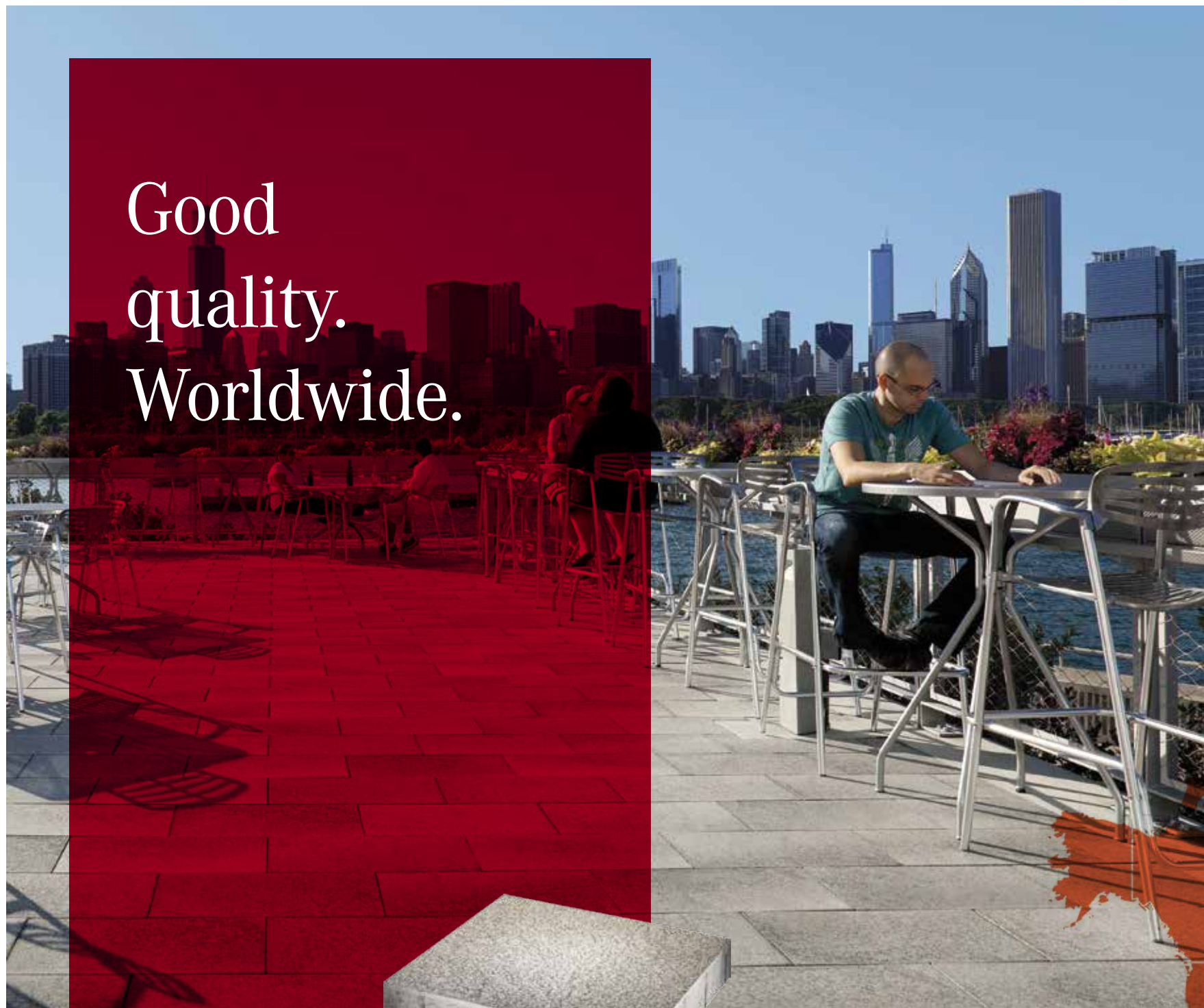
Why choosing a METTEN product?

Life leaves its traces, especially where 24 million people per year add their heartbeat to the pulse of a city. Anyone who joins the action on Germany's most popular pedestrian malls is walking on stones of METTEN Stein+Design. And even after more than 25 years La Linia® still provides a prestigious reception to the visitors to Cologne's Neumarkt.

For the design of many public squares and boulevards throughout Europe paver stones out of the METTEN range were chosen. These locations are a touchstone and evidence to a level of quality which embodies and transmits the joy of living – over the course of many decades.



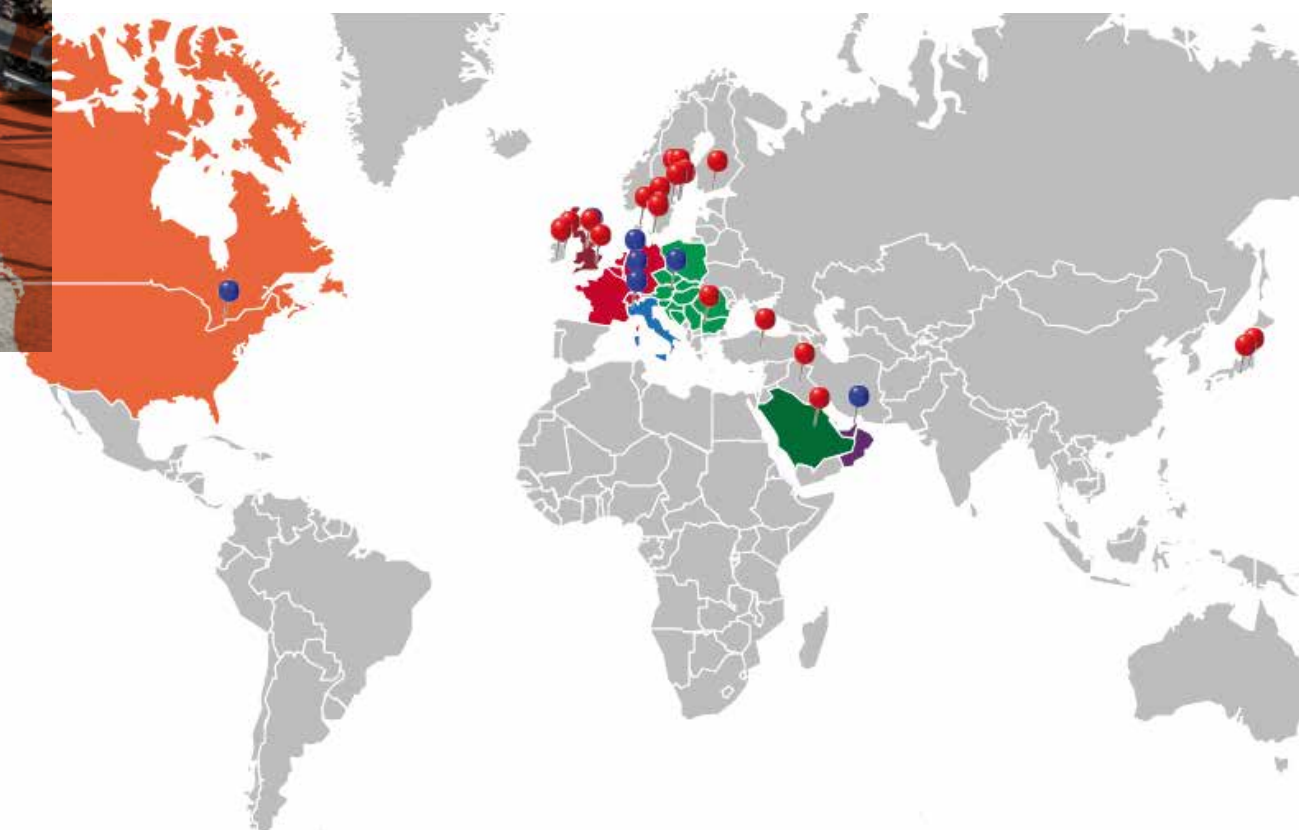
Good
quality.
Worldwide.



METTEN INTERNATIONAL.

Our products are the result of years and decades of research and further development. This unique knowledge creates pavers and slabs whose timeless elegance, uncompromising design and product properties fascinate customers the world over.

Together with our international partners – we have granted licences in 25 countries – we have been implementing impressive projects throughout the world for many years now. Along with first-class stones, we also offer you the high level of logistics competence required to ensure that they arrive at the construction site not only on schedule but also in optimal quality.



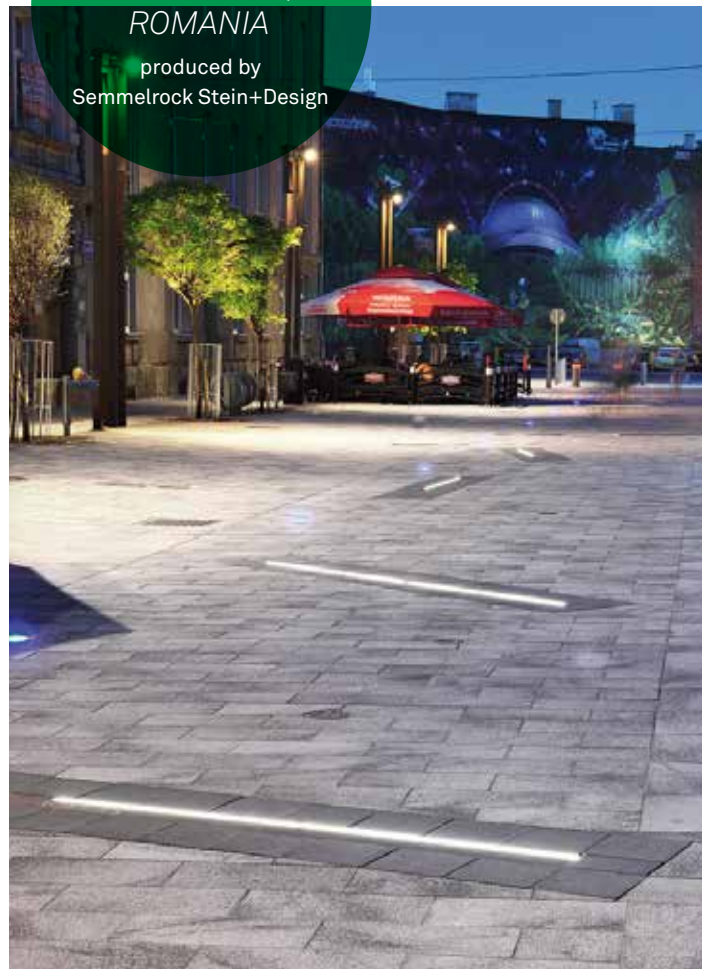


REFERENCES

UMBRIANO®

*BUCHAREST,
ROMANIA*

produced by
Semmelrock Stein+Design



UMBRIANO®

*TORONTO,
CANADA*

produced by
Unilock

PALLADIO®

*WOLFENBÜTTEL,
GERMANY*

produced by
METTEN Stein+Design





BOULEVARD®

COLOGNE,
GERMANY

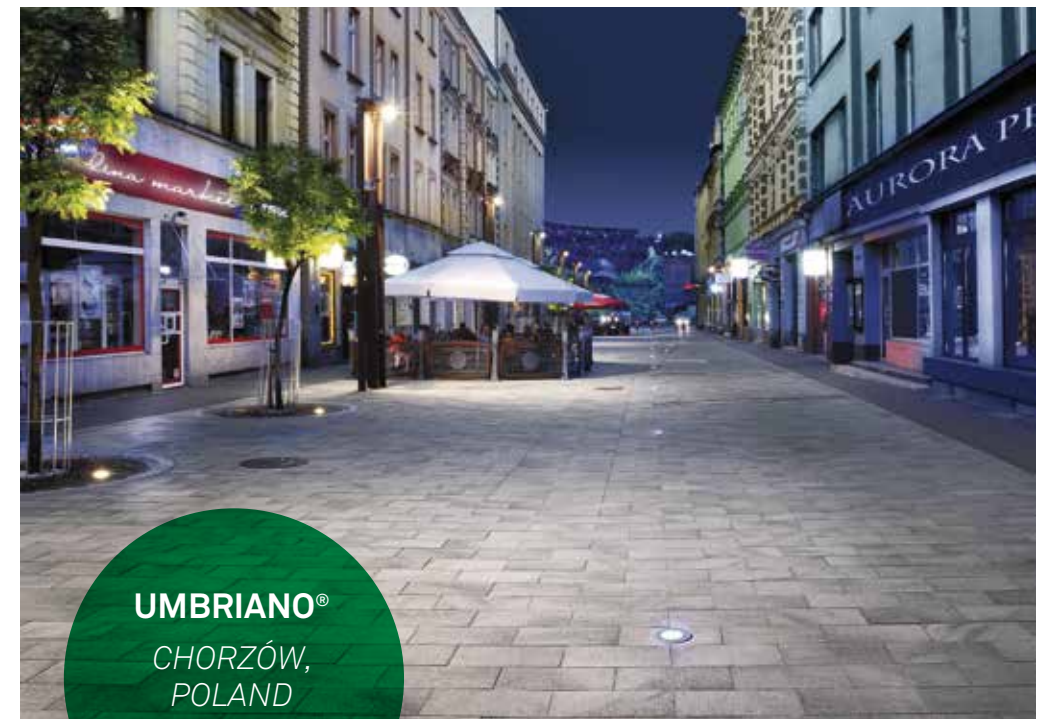
produced by
METTEN Stein+Design



UMBRIANO®

TORONTO,
CANADA

produced by
Unilock



UMBRIANO®

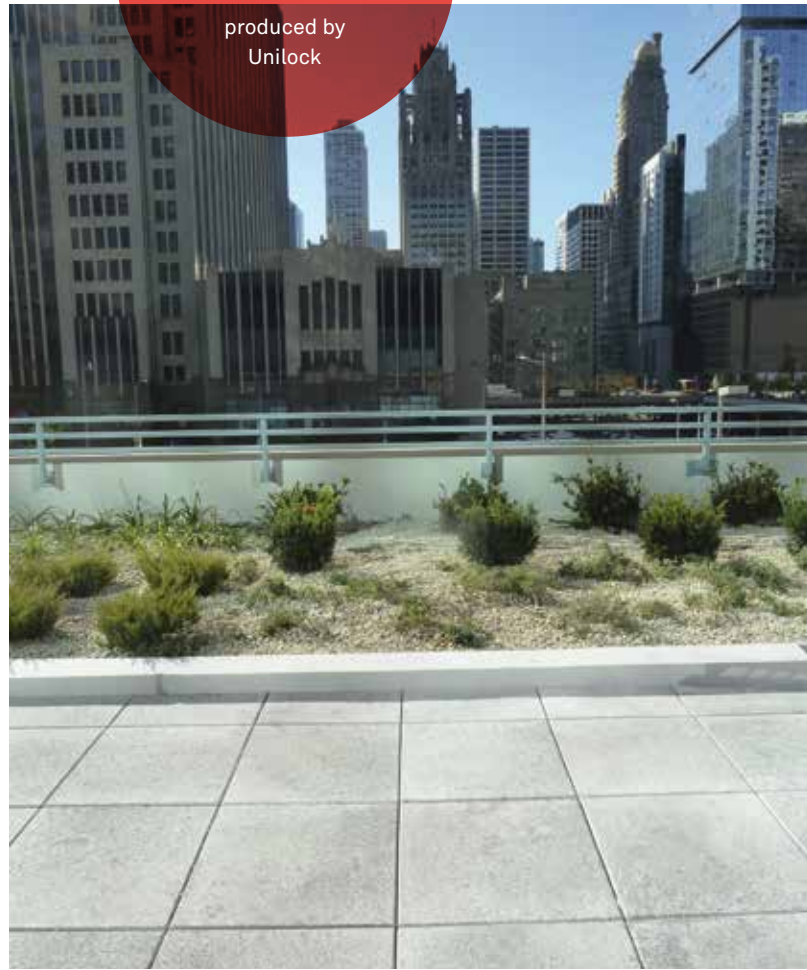
CHORZÓW,
POLAND

produced by
Sammelrock Stein+Design

UMBRIANO®

*CHICAGO,
USA*

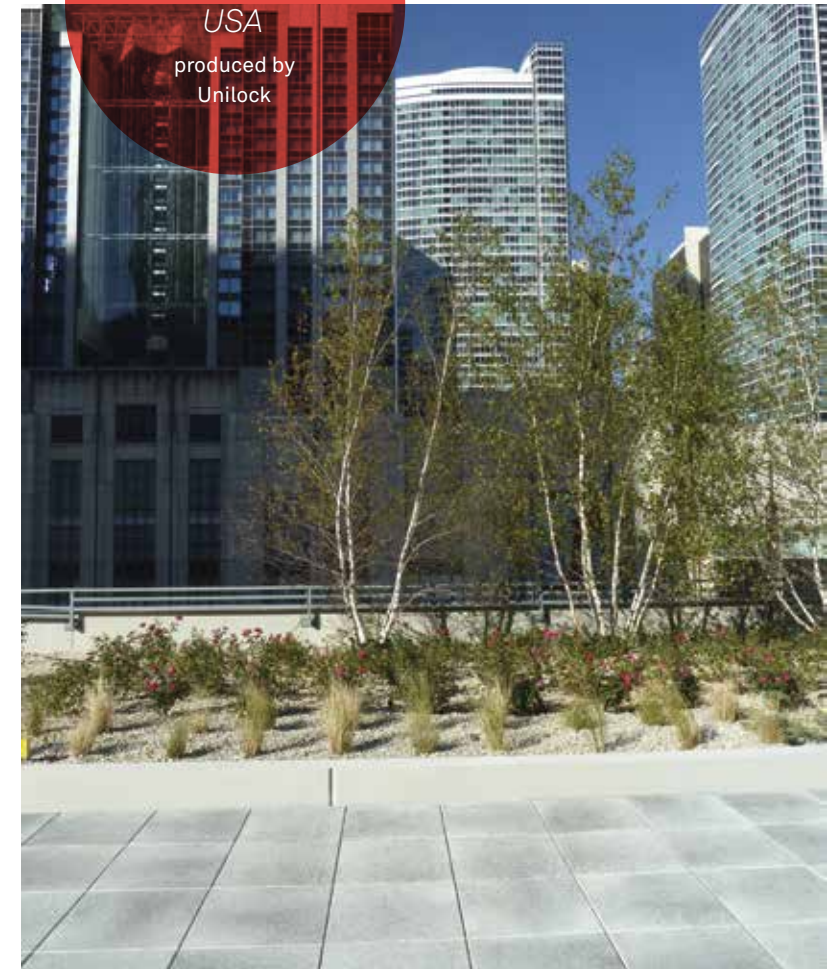
produced by
Unilock



UMBRIANO®

*CHICAGO,
USA*

produced by
Unilock



UMBRIANO®

*MARBURG,
GERMANY*

produced by
METTEN Stein+Design

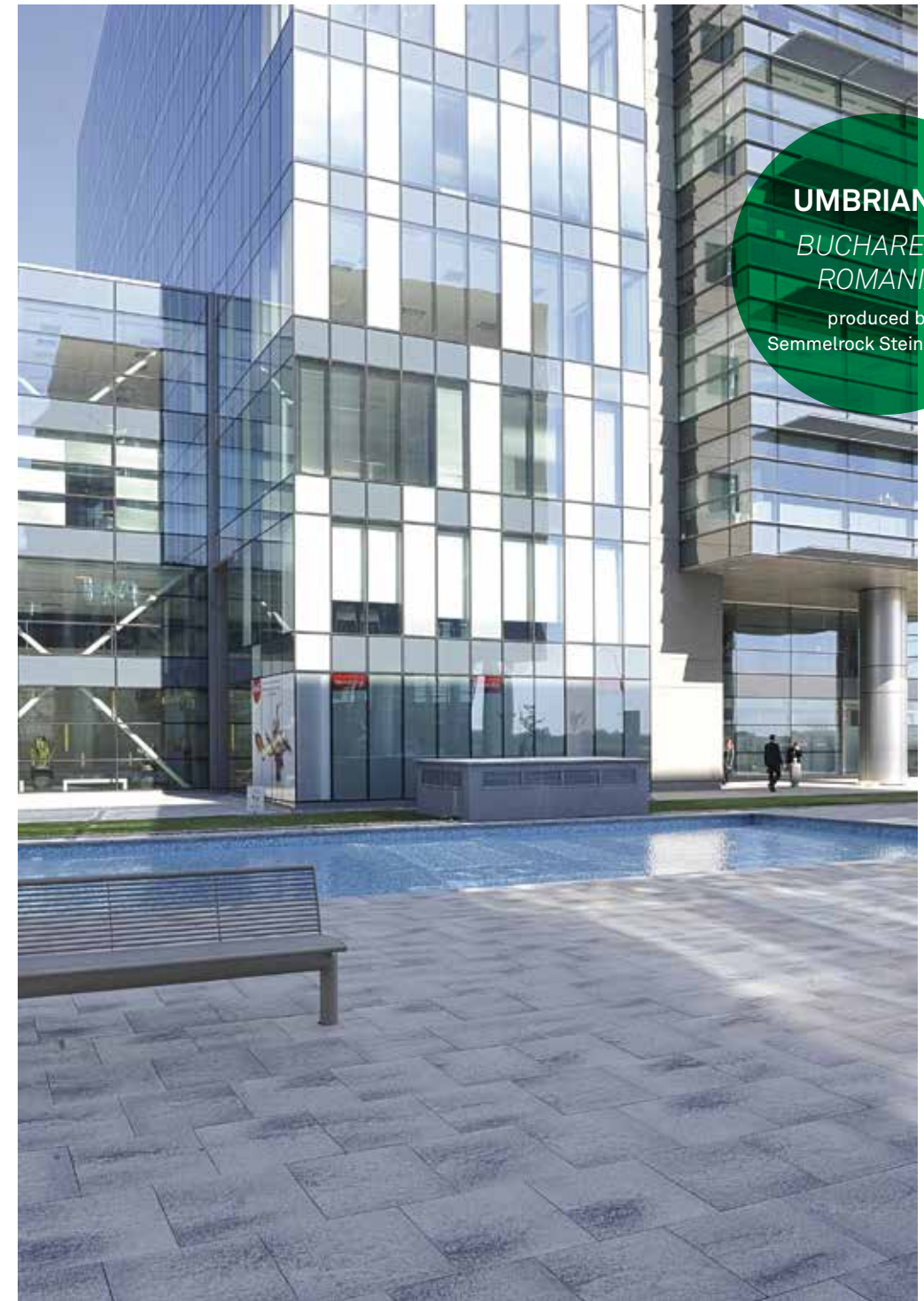




UMBRIANO®
TORONTO,
CANADA
produced by
Unilock



UMBRIANO®
RIYADH,
SAUDI ARABIA
produced by
METTEN Stein+Design



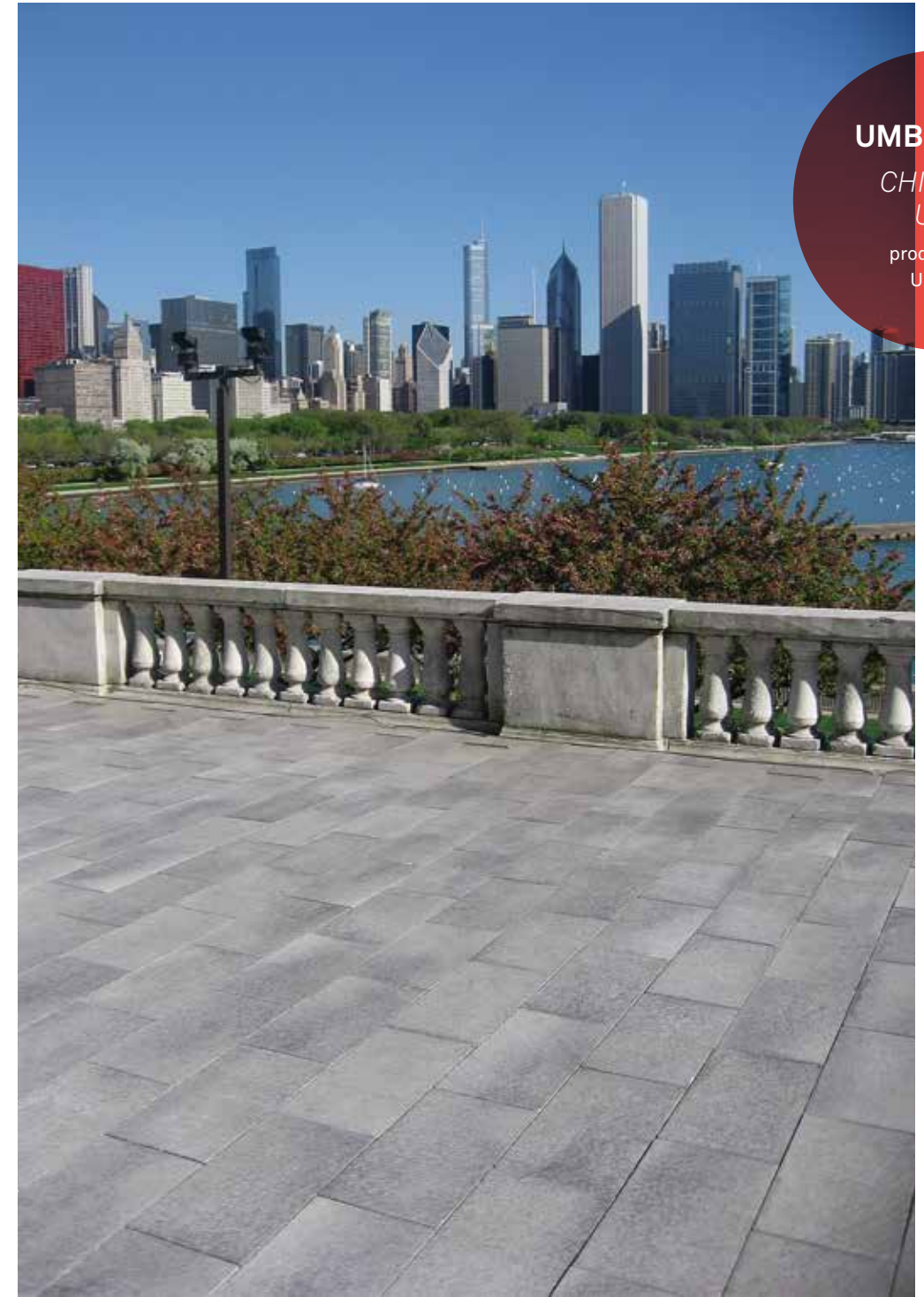
UMBRIANO®
BUCHAREST,
ROMANIA
produced by
Semmelrock Stein+Design



BOULEVARD®

HAMBURG,
GERMANY

produced by
METTEN Stein+Design



UMBRIANO®

CHICAGO,
USA

produced by
Unilock

ARCADIA®
BRUSSELS,
BELGIUM
produced by
METTEN Stein+Design



**CONCEPT
DESIGN**
MONTPELLIER,
FRANCE
produced by
Birkenmeier Stein+Design



**BOULEVARD®
CONCEPT DESIGN**
KNOKKE,
BELGIUM
produced by
METTEN Stein+Design

UMBRIANO®

NEW YORK,
USA

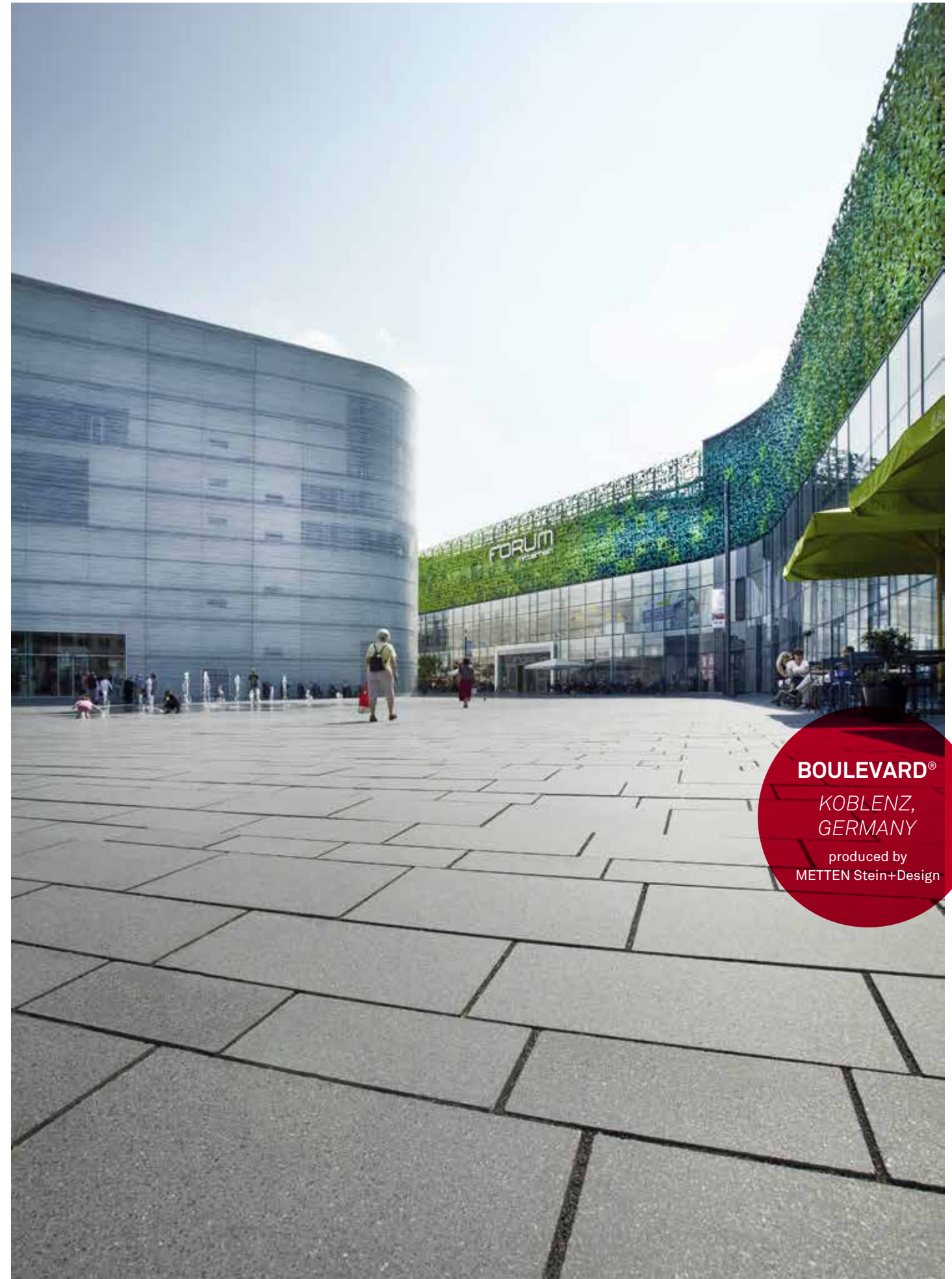
produced by
Unilock



UMBRIANO®

KAPFENBERG,
AUSTRIA

produced by
Sammelrock Stein+Design



BOULEVARD®

KOBLENZ,
GERMANY

produced by
METTEN Stein+Design

BELPASSO®
NIJMEGEN,
NETHERLANDS
produced by
METTEN Stein+Design



IL CAMPO®
LONDON,
UNITED KINGDOM
produced by
Marshalls



BELPASSO®
CHICAGO,
USA
produced by
Unilock

IL CAMPO®
LONDON,
UNITED KINGDOM
produced by
Marshalls



UMBRIANO®
TORONTO,
CANADA
produced by
Unitlock

BELPASSO®
CHICAGO,
USA
produced by
Unitlock



TOCANO
HENNEF,
GERMANY
produced by
METTEN Stein+Design

A photograph of three business professionals in a meeting, overlaid with a red tint. The word "CONSULTING" is written in white capital letters across the center. The image shows a woman on the left, a man in the middle, and a man on the right, all looking at a tablet or laptop. The background is a tiled floor.

CONSULTING



THE CONSULTING PROCESS.

Based on our past experience which we have gained during the training of the Umbriano® production process to more than 10 companies, we are able to offer the following services for you:

- design and optimizing of plant layouts for concrete block manufacturing plants
- technical and commercial support with regard to the machine and supplier selection
- analysis of raw materials and optimizing of recipes
- improvement of product quality
- implementation of the CleanTop®-Technology

- introduction of licensed products
- extensive training of employees in production site in Overath and at your local site
- support in the realization of marketing materials

The typical steps of METTEN consulting:

- 1 **meet and exchange** about the companies and the market situation.
- 2 **definition** of the desired services.

- 3 **local sampling** with possible licensed products for checking the market situation.
- 4 offer for the **technical implementation**.
- 5 integration of additional equipment for licensed products or **improved recipes**.
- 6 extensive **training of employees** in production site in Overath and at your local site.



UMBRIANO. THE PRODUCT.

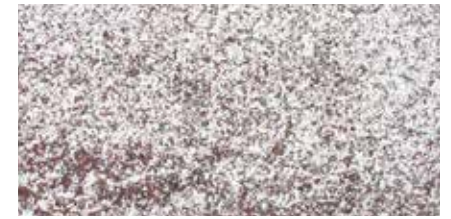
PROPERTIES

- Surface with the appearance of sawn natural stone.
- CleanTop® surface with the Clean Factor CF 90:
 - Dirt repellent.
 - Natural appearance in combination with surface protection.
 - Easy to clean compared to paving systems without CleanTop®.
 - Algae and moss inhibiting.
 - No subsequent impregnation necessary.
- Variety of sizes, thickness of the stone possible from 5 to 18 cm.
- Finishing with or without chamfer.
- Special method of stone hardening by a clima-guided surface processing.
- Non-slip.
- Resistant to frost and de-icing salt.
- METTEN innovation. Registered design. Production process patented.

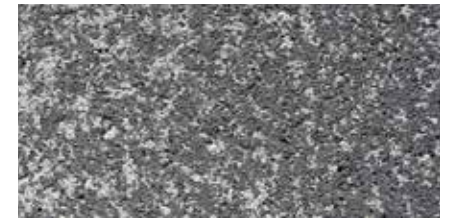
Whether as five-centimetre-thick slab for the pedestrian zone or as an eight-to-eighteen-centimetre-thick paver system, which withstands the heaviest traffic loads – the finely grained Umbriano concrete stones with unchamfered edges and the attractive appearance of sawn natural stones are highly appreciated in both public and private settings. And they add value to entrance areas, walkways, boulevards and inner city squares – each representing a unique architectural project with individually textured stones. Umbriano allows the design of peaceful and homogeneously attractive areas with excellent accessibility by foot. CleanTop® surface protection with CF 90 facilitates care and cleaning of the stone. METTEN has developed its own manufacturing process for Umbriano – an unique process which is international patented. Umbriano won the “iF product design award” and has been nominated for the design award of the Federal Republic of Germany.



Grey granite-white textured



Grey granite-red textured



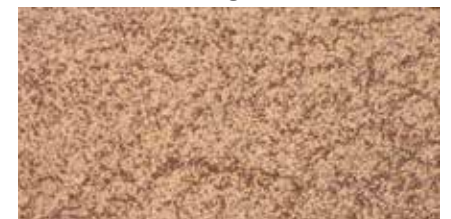
Anthracite-white textured



Grey-anthracite textured



Granite beige textured



Beige-brown textured



Rubiginous brown



Jura yellow



UMBRIANO. A GLOBAL BRAND.

Umbriano is worldwide a very successful product. Due to its attractive and very natural surface design, Umbriano is offering new possibilities of designing outdoor spaces whether it is in public or private domain.

The product design as well as the manufacturing process is patented in many countries.

This helps to avoid copies in the local markets produced by other manufacturers. Of course, the absence of an alternative product is improving the price level for Umbriano during a bidding process.

Umbriano comes with a special CleanTop® surface CF 90 offering your customer a surface protection, with unique attributes like „easier to clean“.

The range of possibilities using the Umbriano technology is huge. It started as a straight, unchamfered product with the appearance of sawn natural stone and nowadays the range of Umbriano offers modern, innovative sizes like 100 x 100 x 8 cm. In addition a walling system is available as well as more rustic looking pavers with special treated edges.

METTEN has already granted licenses to the following partners:

- Birkenmeier Stein+Design (South Germany, Swiss, France)
- Semmelrock Stein+Design (Austria, Poland, Croatia, Hungary etc)
- Ediltubi (Italy)
- Consent (Dubai, UAE)
- Metara (Saudi Arabia, future production)
- Unilock (Canada and US)



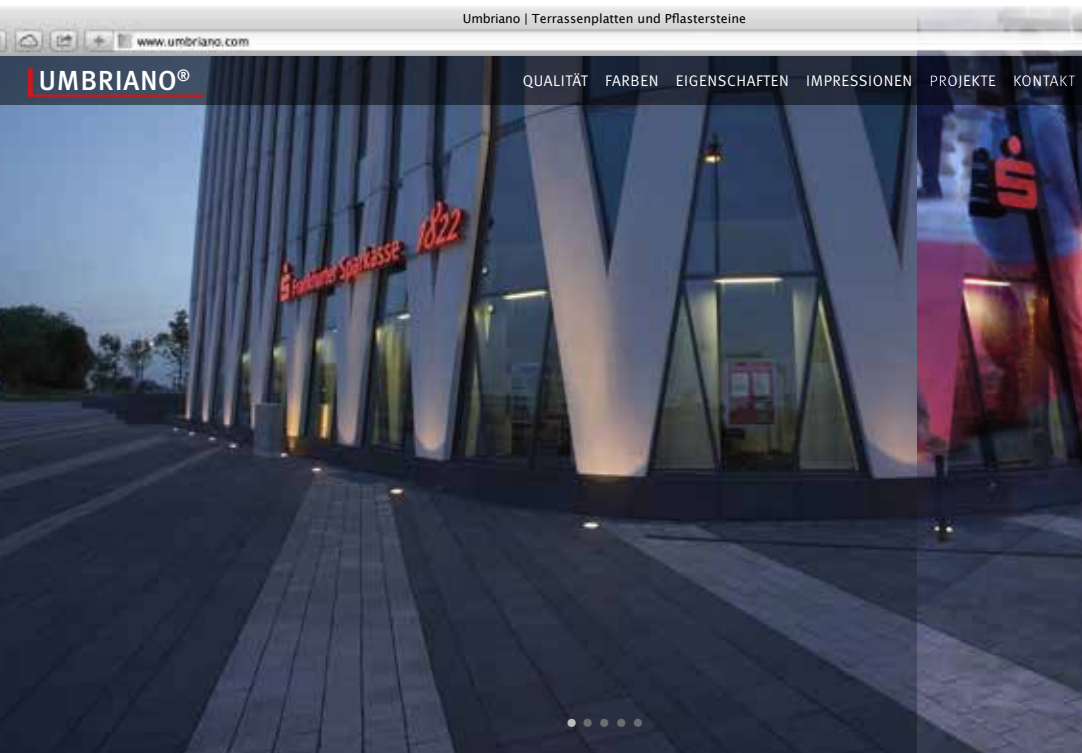
THE UMBRIANO LICENSE.

Keyfacts of the Umbriano License:

- Some additional machines are required to be able to manufacture Umbriano on a standard board machine. Which settings are necessary for your plant will be **suggested individually** wased on your plants' facilities.
- License is including a **training in Overath** for machine operators, learning the production process and the CleanTop® technology.
- While starting the production at your local site you will be **supported by our engineers.**
- **Marketing support** by using the international pictures of Umbriano for brochures, website etc.

- Possibility to take part in **international Umbriano meetings.** We have started these meetings in 2015 sharing a lot of technical experiences. Not only about the Umbriano productions, but also about general topics of our business like „production boards“, „machines“, „moulds“ etc. Our aim is to establish a world-wide network of manufacturing partners sharing advantages of this group.

The Umbriano license consists of a single lump sum for the knowhow transfer and a turnover based royalty combined with a minimum annual fee.



THE UMBRIANO NETWORK.

- 1 Umbriano is a product which attracts international attention both to architects and private customers. The most beautiful projects are summarized on www.umbriano.com. This website helps to present Umbriano as an international brand, to publicize and to point to references. At the same time it provides each licensee the opportunity to get involved there as well with its projects.
- 2 In particular, regarding the technical level the Umbriano network is beyond product-related topics - the international Umbriano meetings are rather technical symposia. Here will be discussed the current technical issues, which are important in the more than 40 plants, which are operated by the Umbriano network members.
- 3 In addition to the technical issues in the context of international Umbriano meetings, there is also an intense exchange in all fields of marketing. It starts with the sharing of images, videos, laying instructions and goes to discussions of marketing strategies, for example in the field of social media etc.

It is our aim to establish a world-wide network of manufacturing partners sharing advantages of this group.



BESIDES
UMBRIANO.



BOULEVARD.

PROPERTIES

- Very dense, ground, fine blasted or smooth velvety surface.
- CleanTop® surface with Clean Factor CF 90:
 - Dirt repellent.
 - Natural appearance in combination with a surface protection.
 - Easy to clean compared to paving systems without CleanTop®.
 - Algae and moss inhibiting.
 - No subsequent impregnation necessary.
- High colour longevity due to the use of selected, colour co-ordinated natural stone chippings.
- Complies with stringent Austrian standards for resistance to frost/de-icing salt.
- Non-slip: SRT tested. Minimum 55 SRT, test certificate is available on request.

Boulevard is a classic for the demanding design of outdoor public spaces. Since its commercialisation, more than 500,000 square metres of this METTEN concrete paver have been laid. Its finely ground surface features a matt silk finish. The grinding process highlights the carefully matched natural stone aggregates embedded in the material – aggregates of European origin such as basalt, granite, greywacke, porphyry or Rhine gravel. The available range of aggregates, and with it the choice of individual colourations of the concrete stone, are virtually unlimited. Boulevard features a non-slip finish (SRT tested), is resistant to frost and de-icing salts, and also withstands heavy traffic loads such as on market squares, at bus stations and on shopping malls.



Grassano



Silk beige



Diamond grey



Nardo



Lombardo



Grey-yellow



Sandstone



Rubin brown



SENZO.

PROPERTIES

- Homogenous and very dense architectural concrete surface with a puristic, restrained impression.
- Modern, generous stone dimensions. Tiling patterns, very well accessible.
- CleanTop® surface with Clean Factor CF100:
 - Highly dirt repellent.
 - Stains of leaves and flowers, coffee, ketchup, mustard, barbecue fat or the like can be promptly removed compared to products without CleanTop®.
 - Algae and moss inhibiting.
 - No additional impregnation necessary.
 - Free from lime efflorescence (when professional handled according to our installation guidelines).
- Very well accessible, low proportion of joints.
- Resistant to frost and de-icing salt.
- Non-slip.
- METTEN innovation. Patented manufacturing process.

Senzo stands for reducing down to the essentials. With an overall impression that appears more homogeneous than any cast surface, this innovative paving system with a high-density concrete surface reinvents the fair faced concrete. And it completes the modern design of the outdoor area with its generous sizes, precise contours and monochrome surface in restrained shades of beige, sand, grey and anthracite. Senzo is non-slip and pleasantly accessible by foot with its tiling patterns and unchamfered stone edges. Finished with the CleanTop® surface protection CF 100, the stone provides extremely effective shielding against lime efflorescence and soiling of all kinds. As a result, the stone's surface is particularly resistant to weathering, and it is also resistant to frost and de-icing salt and easy to clean. The manufacturing process is internationally patented.



Bianco



Titan



Sand



Carbon



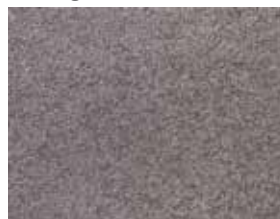
Granite beige textured



Beige-brown, textured



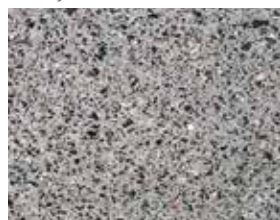
Grey granite-white textured



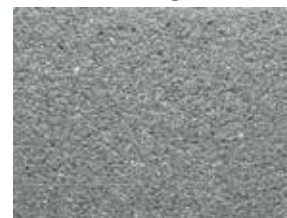
Grey-anthracite, textured



Lombardo, ground



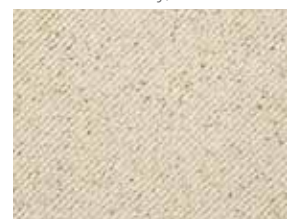
Grassano, ground



Quartz Grey, blasted



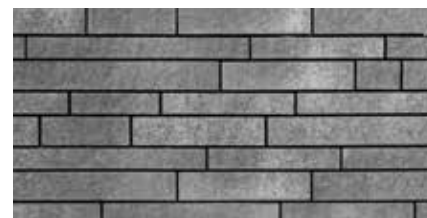
Gravino, diagonal texture



Luciano, diagonal texture



Notturmo, diagonal texture



Anthracite-grey, textured



Saharabeige-grey, textured



PROPERTIES

- One wall system with various options: ground, blasted or textured surface.
- CleanTop® surface:
 - Easy to clean compared with conventional walls.
 - Algae and moss inhibiting.
 - No subsequent impregnation necessary.
 - Permanent colour enhanced surface.
- Suitable for retaining walls and free-standing walls.
- Elegant lines.
- Narrow shadow gap.
- Easy to build.
- Coping with drip nose on both sides to prevent streaks.
- METTEN innovation. Patented.

PROPERTIES

- Retaining wall.
- Very narrow, elegant alignment by a shadow gap. Staggered joint by Z-Block.
- Very finely textured surface with the character of textured natural stone.
- The upper wall ending can be designed in two ways:
 - coping flush, top textured, two long sides cutted.
 - coping overlaying, top textured, two long sides cutted incl. drip noses.
- CleanTop® surface with Clean Factor CF 90.
- METTEN innovation. Patent pending.

BELMURO.

Walls have many functions. They give a feeling of security in that they provide privacy and protection from noise as well as providing support for slopes or raised flower beds. These functions are integrated in the good design and fascinating aesthetics of walls built with BelMuro.

CleanTop surfaces are expressive, colourfast, less susceptible to soiling and easy to clean.

LINARO.

Walls and borders are essential design elements of open space design, in the private and public area. With a concise accent on the horizontal, the new wall system Linaro complements the architectural exterior design. Due to flat lying stone formats and narrow horizontal shadow gaps Linaro appears more light and slim. The Z-shaped stones allow an individual staggered joint design.

The slightly textured surface of the elegant retaining wall reminiscent flamed natural stones. All end blocks are with a structured face side, blasted head side and and revolving shadow. Due to the CleanTop® surface protection of Linaro with Clean Factor CF 90 Linaro has a reduced soiling, is algae and moss inhibiting and no subsequent impregnation is necessary.



METTEN
stein+design

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www.metten.com