

The concrete
OF THE FUTURE.


100%
CEMENT-FREE

METEN

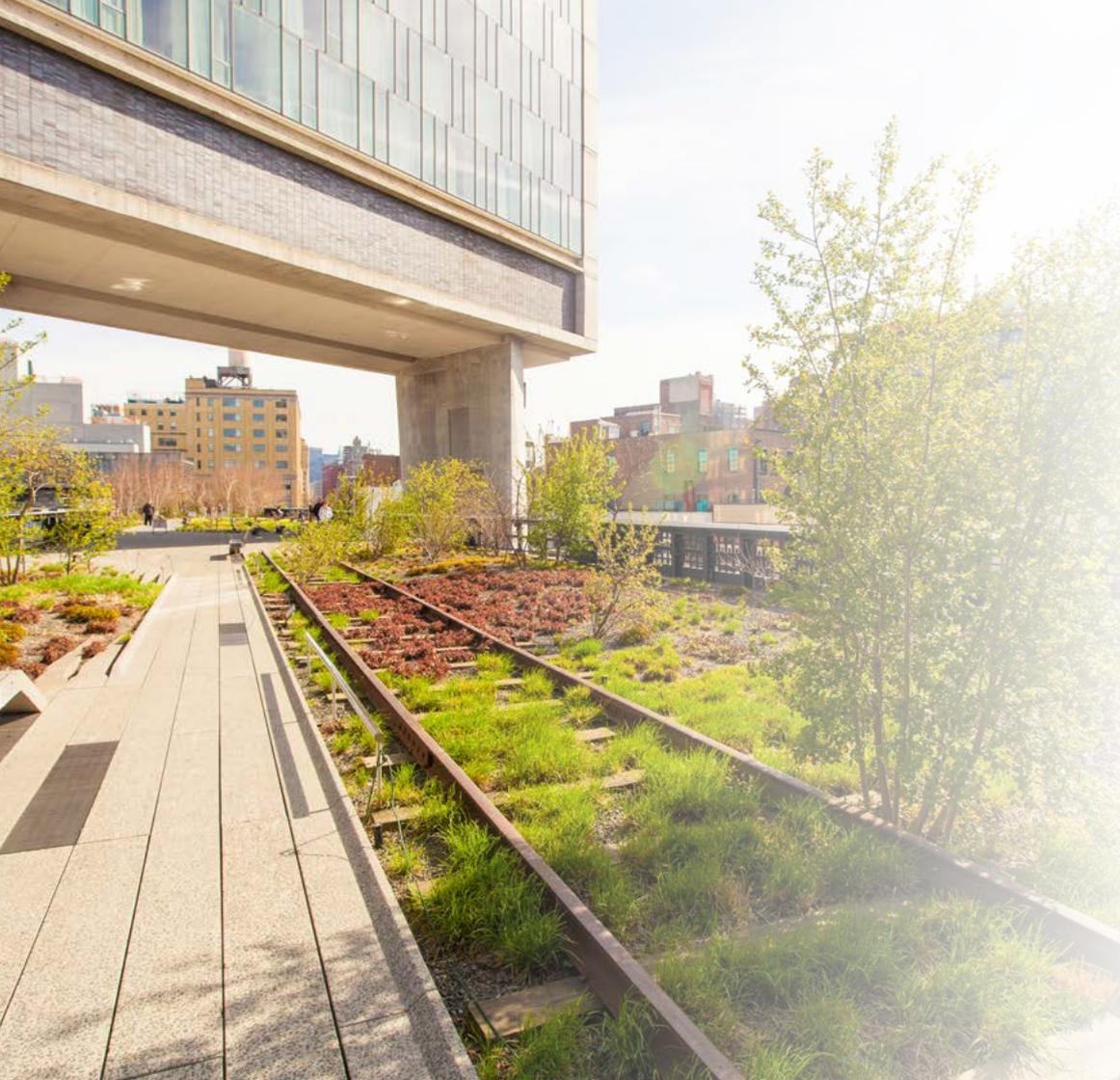
stein+design®

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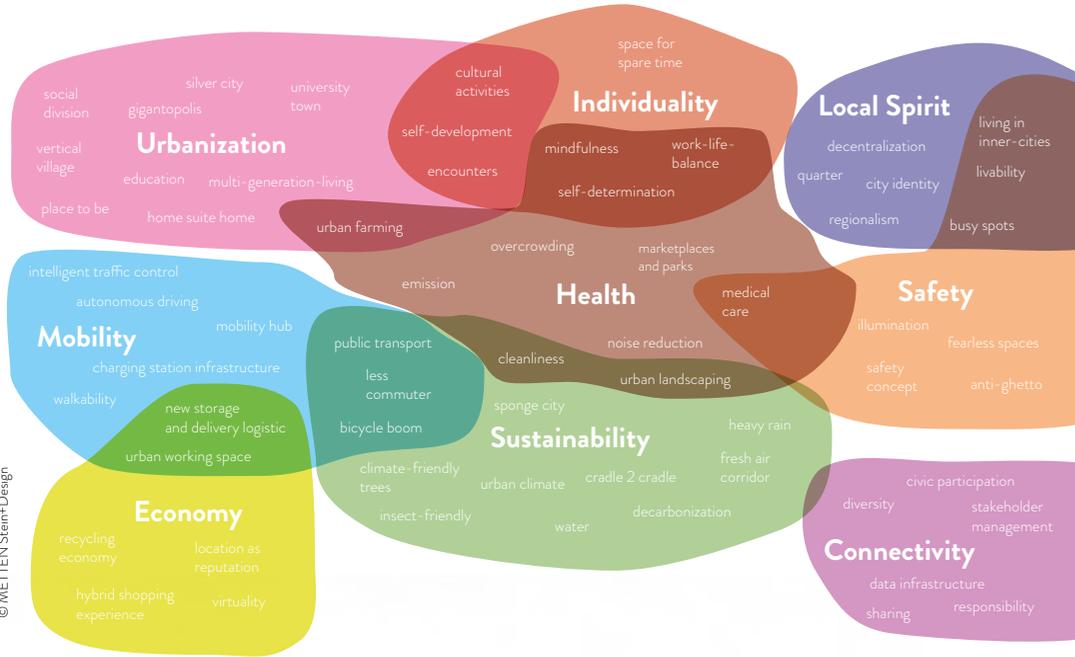


IN THE **CITY** **OF THE FUTURE.**

How will the city of the future look like?

Changes in mobility and shopping behavior as well as climatic challenges with drought and heatwave require new concepts in urban development.

What does this mean for municipalities in terms of planning? How can landscape architects manage these demanding topics?

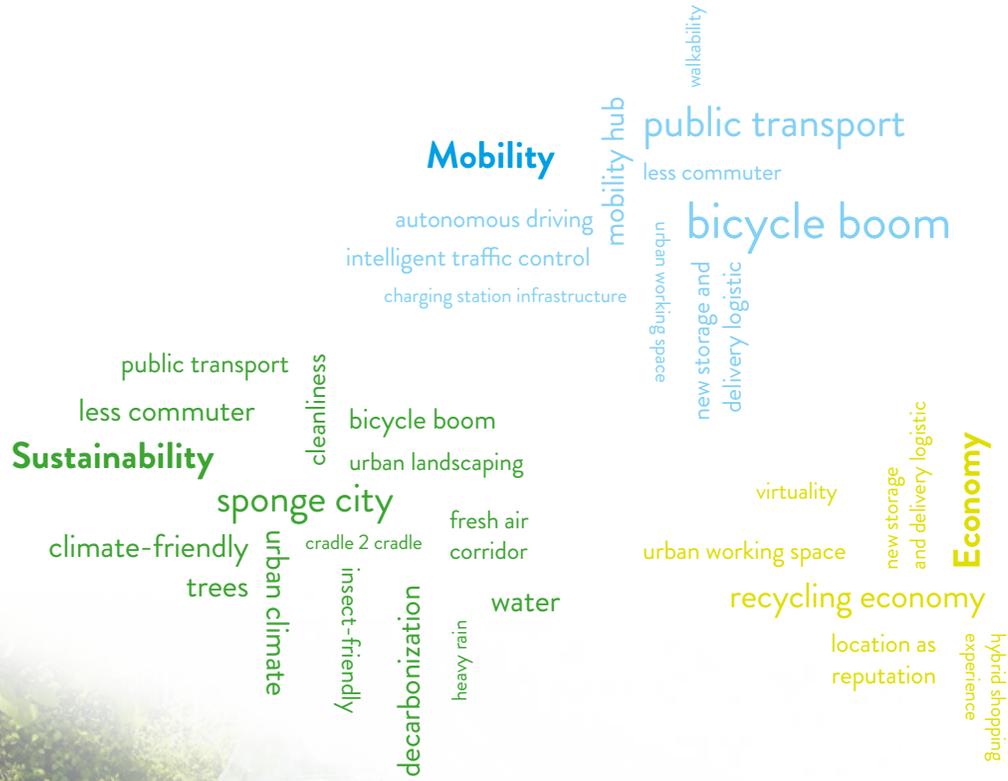


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IN THE CITY OF THE FUTURE.

We have compiled our point of view from various workshops - without claim of being complete. It is designed as an invitation to exchange and develop new ideas. Together with you, we would like to develop solutions that will make our cities attractive and livable places in the future. What are your ideas for the city of the future?

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IN THE CITY OF THE FUTURE.

What challenges do we face, if we want to design the city of the future? Which trees will be considered climate-friendly in 2030? Can my city also become a sponge city? Is the shopping experience in the inner city outdated because everyone prefers home delivery? What will the charging infrastructure look like in the future?

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conventional concrete stone

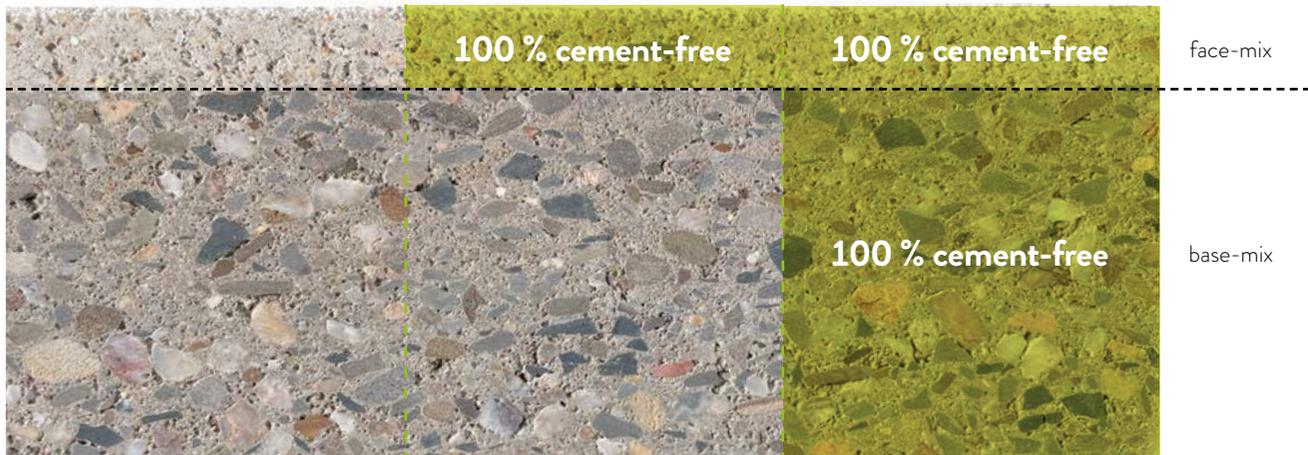
face-mix and base-mix
with cement

EcoTerra®

face-mix without cement
saves up to 26,5 % CO₂

EcoTerra ZERO®

face-mix and base-mix
without cement
saves up to 75 % CO₂



100 % cement-free

100 % cement-free

face-mix

100 % cement-free

base-mix

since 2021

since 2023

WITH THE **STONE** **OF THE FUTURE.**

For many years, we have been researching how to produce concrete stones more sustainably. The result of 7 years research and development is a new technology that celebrated its world premiere in 2021: EcoTerra®.

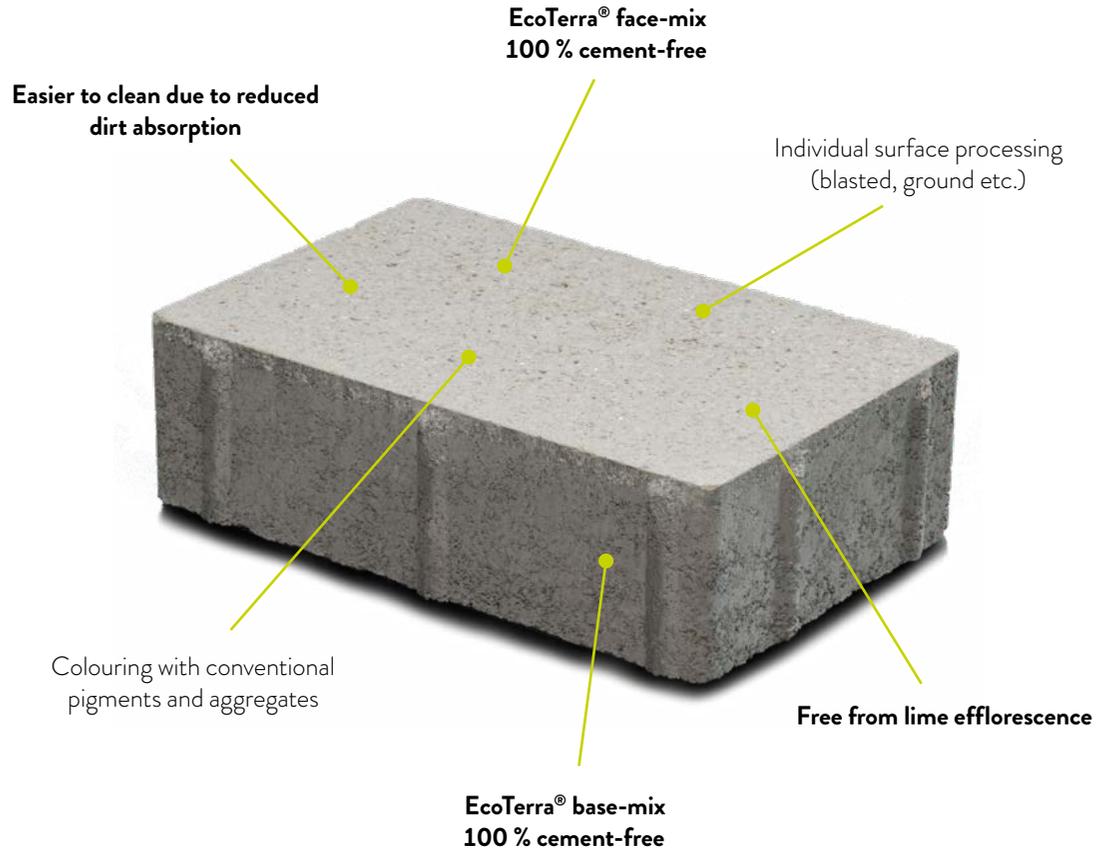
With this invention, we avoid cement in the face-mix of the stone. In 2023, we achieved the next major target: the world's first paving stone produced entirely with EcoTerra® technology: EcoTerra ZERO®.

International patent.

The uniqueness of our Eco-Terra technology for the 100 % cement-free stone in face-mix and base-mix is patent pending. Already now, we have granted production licenses in 4 countries.

EcoTerra®

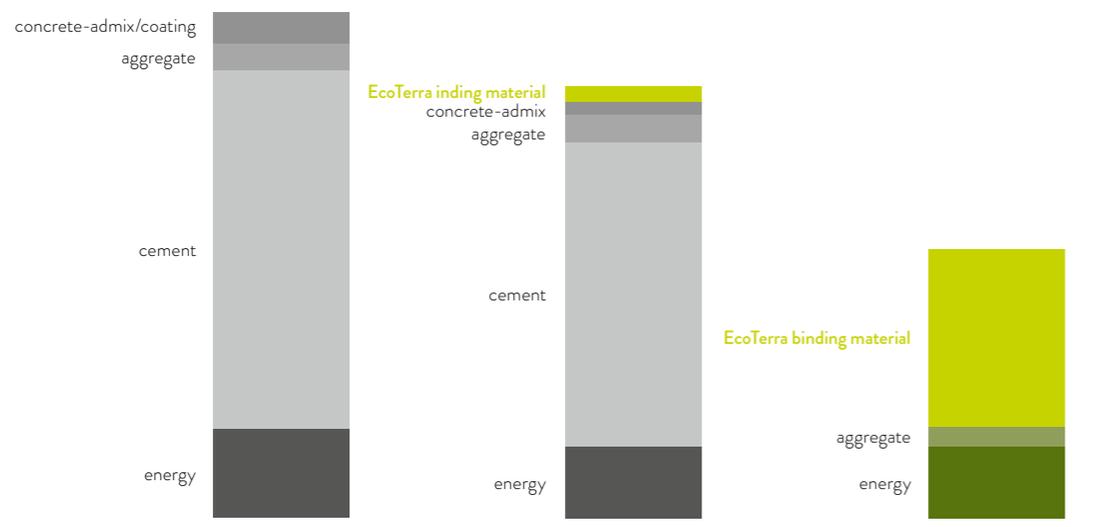
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THE **STONE** OF THE FUTURE.

Manufacturing without cement protects the environment and improve the properties of the product. Lime efflorescence is history and the colours stay permanently intense. The stone surfaces absorb less dirt and are therefore easier to clean – and everything with the same load-bearing capacity of the paving stone!

EC OT ER
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15-26,5% less CO₂-emissions

50-75% less CO₂-emissions

100%
cement-free

100%
identical to conventional
concrete stone

THE MATERIAL OF THE FUTURE.

The 100% cement-free concrete stone is not only convincing with a large number of better product properties, first of all it is also a climate-friendly stone. The CO₂ impact during the production process is only a sensational max. 10 kg CO₂/sqm. This means a saving depending on product and stone thickness of 15-75% CO₂/sqm.

100%
recyclable

100%
properties analog
DIN EN 1338/1339



EcoTerra ZERO
in motion picture.
Simply scan
the QR-Code.



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THE **SUSTAINABLE** **CONCRETE STONE.**

The stone without cement is a milestone on the way to a resource-efficient world. But even the best stone becomes particularly sustainable when you take advantage of all opportunities: use of recycled material, water-permeable joints for strong infiltration, BlueAir technology for cleaning the air, etc.

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THE SUSTAINABLE CONCRETE STONE.

ECOTERRA

EcoTerra® is our technology that reduces the use of cement in concrete stones. Optionally as concrete stones with a **cement-free face-mix** or as EcoTerra®Zero, the **100% cement-free stone without cement in face-mix and base-mix.**

RECYCLING MATERIAL

Without exception, **all of our products can be recycled** and put to another use - for example, as crushed substructure of forest roads - or reuse in the concrete stone production. In a large number of our products we use **recycled material in the base-mix**, which previously arose as waste in our own production and reprocessed. In this way, we save valuable primary raw materials.

WATER INFILTRATION

Heavy rainfall becomes more frequent. Ecopaver with the infiltration system Aqua make it possible to **unseal surfaces without loss of aesthetics**. Rainwater can drain away quickly and returns to the **water cycle** in the shortest possible way.

BLUE AIR

Sunlight converts harmful **nitrogen oxides** (NOx) from the **air into mineral nitrates** at the stone surface. It is the same principle that plants use to improve the air quality. This photocatalysis actively reduces air pollution and **works over the life cycle of the stone.**

We call the principle of these "fresh-air stones" BlueAir® technology. The most elegant contribution to clean air.

CLEANING OF CLEAN TOP

In contrast to conventional methods of subsequent sealing or impregnation, the **CleanTop® system is an integral part of the production process** and thereby integrated into the stone. Colours and surfaces are permanently refined and protected. CleanTop® counteracts the effects of weathering and makes the stone **more resistant to wear and tear**. Unlike conventional impregnations, no refreshing after treatment is necessary - CleanTop® provides protection in the long term.



EcoTerra in motion picture.

Seven years of research for a stone without lime efflorescence. The result is a major step of development towards the concrete block of the future.



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THE **SUSTAINABLE**
CONCRETE STONE.

AIR

RECYCLING

CLEANING

WATER



ECOTERRA
ZERO



Electricity



100 % green power
PV-system with
625 kWhh



Heat



Central-heating
with wood chips
Use of industrial
waste heat



Raw materials



Up to 15 %
recycled concrete waste
material in the base-mix
Short transportation
route



Water



Water from
own spring
Extensive water
conditioning



READY FOR THE FUTURE.

As a family owned business in its third generation, we have always felt committed to the environment and sustainability. We initiate many measures in recent years as part of our GreenEfficiency program in order to produce the most modern concrete stones with the less resources as possible. Our new milestone:

EcoTerra ZERO® - the 100 % cement-free stone!





2011

Beginning of "GreenEfficiency" sustainability program



2013

Introduction of energy management according to German SpaEFV



2021

Market launch of EcoTerra®Technologie, cement-free face-mix



2023

Nomination for the "Deutscher Nachhaltigkeitspreis"

1969

Invention of the grass-paving block "Rasengitterstein"



GREEN EFFICIENCY

2012

Calculation of "Carbon Footprint" as one of the first concrete stone manufacturer worldwide



2014

Start of developing EcoTerra®-Technologie



2022

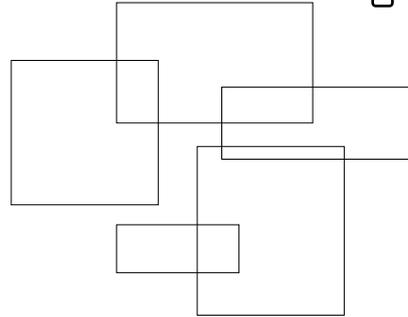
1. concrete stone 100 % cement-free



ECOTERRA
ZERO



20
COLOURS



154
SIZES

ECOTERRA® ZERO

METEN

stein+design™

www.ecoterra-technology.com