
KRUNER
PIONEERING
CEMENT-FREE
CONSTRUCTION

SUMMARY


INTRODUCTION


UNITED IN VISION


UNIQUE BENEFITS


"THERE MUST BE SOMETHING WE CAN DO WITH ALL THIS SAND."
This legendary concept will be the turning point of change in the construction business.
It led us to successfully develop our proprietary binder technology that can transform dune sand into
a sustainable, low-carbon, construction-grade material that outperforms concrete.


PRODUCTS AND
APPLICATION ACROSS
SEVEN INDUSTRIES


PARTNERSHIP AND
INNOVATION


LIVING IN HARMONY

KRUNER INDUSTRIES, DRIVING INNOVATION

Kruner Industries is a next-generation material-and product-innovation company poised to meet global demand for sustainable, energy-efficient, and cost-effective construction solutions with minimal disruption.

A team composed of like-minded, future-oriented people with strong traditional values, we seek to uphold trust and honour in our relationships, steward the resources of our environment, and create a positive impact on society.


UNITED IN VISION
BUILDING KRUNER CITIES: ONE DAY EVERY HOME
AND CITY WILL BE 100% SUSTAINABLE AND
ENVIRONMENTALLY FRIENDLY.


COST-EFFECTIVE


MINIMUM 60% LESS WATER NEEDED


UP TO 80% LESS ENERGY

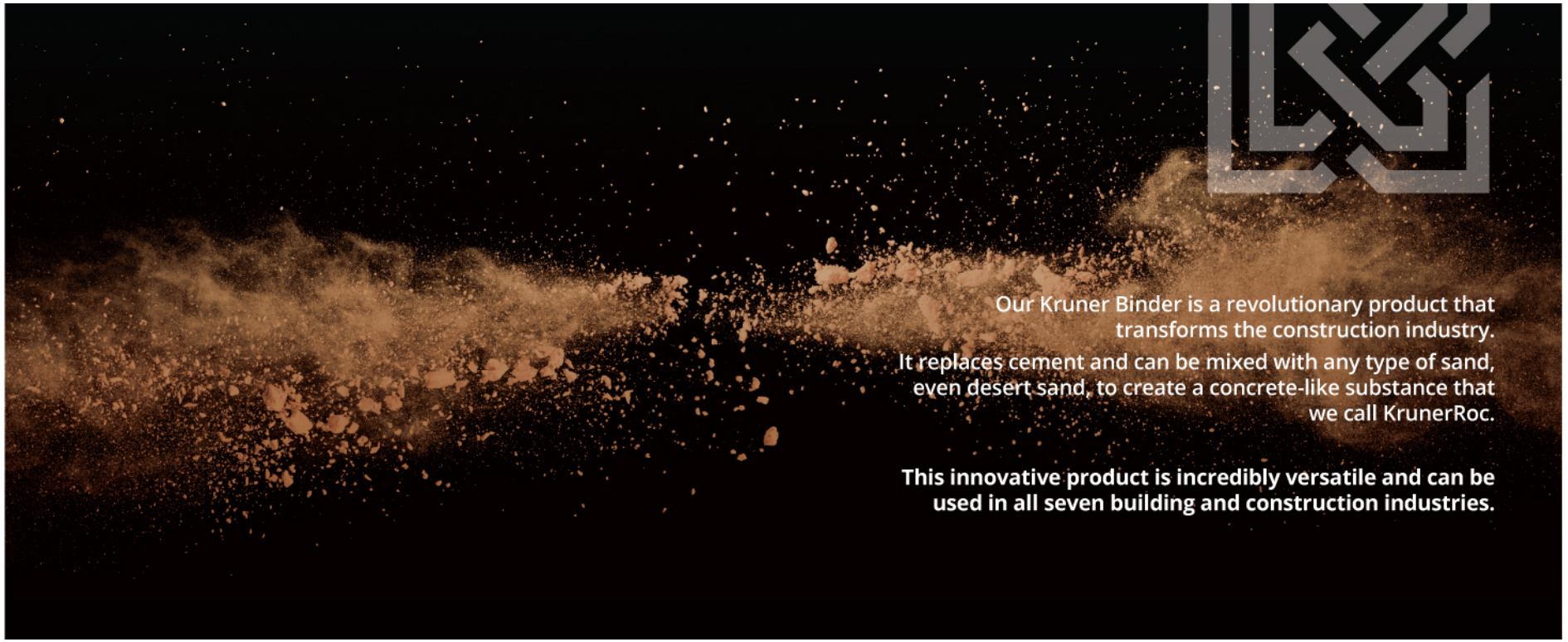
UP TO 90% LESS CO2


100% SUSTAINABLE


CIRCULAR ECONOMY

- Cement-free, no slag or fly ash
- ESG-and SDG-friendly
- Superior performance
- Widely accessible raw materials
- Global scalability
- Harm-free
- Minimal disruption

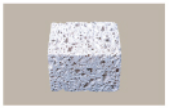
KRUNER'S GROUNDBREAKING SOLUTION FOR BUILDING SUSTAINABLE CITIES



Our proprietary binder technology is the key to all our material innovations. Our binder uses natural and harm-free raw materials that are widely accessible and responsibly mined. It is 100% inorganic and free from synthetic components. We have succeeded in customising our binder to fuse with various raw materials to develop a range of breakthrough, sustainable, and high-performing construction products with extensive applications.

Our binder technology is the only one able to fuse dune sand or mining-waste sand into construction-grade material, making vast untapped resources available for construction use. It is also able to cure clay without the need for kiln firing, significantly lowering energy consumption by up to 80% and CO_2 emissions by up to 90% during production.

Air
=
KrunerInso



Safe, harm-free insulation

Sand
=
KrunerStone

Mouldable designer sandstone

Clay Sand
=
KrunerClay

Stronger clay without kiln firing

Sand Aggregates
=
KrunerRoc

Cement-free, concrete outperforms

KRUNER BINDER APPLICATION

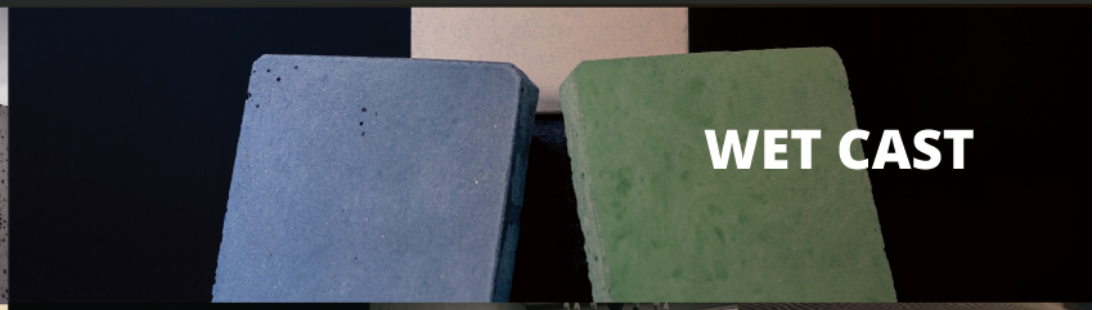
Our binder is applicable across seven construction and building industries.

- Cement
- Precast
- Ready-mix concrete
- Insulation
- Wet cast
- Brick
- Ceramics

7 INDUSTRIES


CEMENT
PRECAST
BRICK


READY-MIX
CONCRETE
KRUNER


WET CAST


INSULATION


CERAMICS


PARTNERSHIP
AND INNOVATION
WORKING TOGETHER WITH VALUED PARTNERS
TO GET MORE ACCOMPLISHED CREATING
THOUGHTFUL AND FUNCTIONAL SOLUTIONS
WITH SUPERIOR QUALITY, VALUE, AND SERVICES

At Kruner Industries, we foster innovation through strategic global partnerships with industry leaders, advanced R&D facilities, esteemed universities and by partnering with the most prestigious research institutions and major authorities in the field of sustainable construction.

These alliances are an integral part of our DNA, providing unique expertise and resources that drive our mission and accelerate innovation.

Through these collaborations, we uphold our commitment to excellence and pioneering solutions.


LIVING IN HARMONY WITH NATURE
We prioritize sustainability in all aspects of our innovation process.
ENVIRONMENTAL STEWARDSHIP
▪ Reduce energy consumption
▪ Reduce carbon and pollutant emissions
▪ Responsibly use raw materials, and draw from untapped resources
▪ Increase use of natural, non-toxic, hazard-free substances
QUALITY AND VERSATILITY
▪ Outperform traditional / alternative materials and products
▪ Expanded applications
▪ High adaptability
GLOBAL AND INDUSTRIAL SCALABILITY
▪ Ease of adoption with minimal disruption
▪ Adaptable to existing production process
▪ Cost-effective and efficient to produce and use
100% RECYCLABLE
100% SUSTAINABLE

KRUNER-CERTIFIED TESTS

Typical values shown without optimisation in accordance with specific application requirements

Test	Parameters	Mean Value	Standard	Laboratory	Report	Date
Compressive strength	28 days after hardening in seawater	58.9 N/mm²	ONR 23303	OFI, Austria	2200742-en / 17085	01-04-22
	Standard	66.0 N/mm²	ONR 23303	OFI, Austria	2102235 / 15821	31-01-22
	28 days after storing in water	68.7 N/mm²	ONR 23303	OFI, Austria	2102235 / 15821	31-01-22
	After fire test	62.7 N/mm²	NA	OFI, Austria	2102235 / 15821	31-01-22
	28 days; Granite sand 0-8mm	56.2 N/mm²	EN 12390-3	TU Wien	BP23/0951	18-04-23
	56 days; Granite sand 0-8mm	61.3 N/mm²	EN 12390-3	TU Wien	BP23/0951	17-05-23
Tensile strength	Granite sand 0-8mm	3.5 N/mm²	EN 12390-6	TU Wien	BP23/0951	20-04-23
Flexural strength	Standard	8.3 N/mm²	ÖN EN 14617-2	OFI, Austria	2102235 / 15821	31-01-22
	Granite sand 0-8mm	5.6 N/mm²	EN 12390-5	TU Wien	BP23/0951	26-04-23
Density	Granite sand 0-8mm	2250 kg/m³	EN 12390-7	TU Wien	BP23/0951	18-04-23
Depth of water penetration	Granite sand 0-8mm	13mm	EN 12390-8	TU Wien	BP23/0951	22-05-23
Modulus elasticity	Granite sand 0-8mm	18,500 N/mm²	EN 12390-13	TU Wien	BP23/0951	19-04-23
Delamination effect / Pull-Out test 16mm bar	Granite sand 0-8mm; 16mm steel bar	min. 97.1kN max.: 102.5kN	EN 10080 Anhang D	TU Wien	BP23/0951	22-05-23
Burning behaviour - Calorific value		Class A1: 0 MJ/kg	EN ISO 1716	OFI, Austria	2102235 / 15821	31-01-22
Burning behaviour - non-combustibility		Temp. rise Class A1: 1°C Mass loss Class A1: 4% Flaming duration A1: 0 sec	EN ISO 1182	OFI, Austria	2102235 / 15821	31-01-22
Thermal conductivity	Solid block; Quarz 0,1-0,2	Density:1911kg/m³ 0.777W/mK	EN 12667	OFI	2201450 / 18138	20-07-22
	Foam block	Density: 202kg/m³ 0.048W/mK	EN 12667	OFI	2201450 / 18138	20-07-22
	Insulation foam block	Density: 90kg/m³ 0,039W/mK	EN 12667	Kruner Lab	2201450 / 18138	20-08-23

CONTACT US

Kruner Industries GmbH
Erdbergstraße 8/2
1030 Vienna
Austria

office@krunerindustries.com
www.krunerindustries.com


KRUNER
INDUSTRIES