



CONCR3DE
YOUR 3D POWDERHOUSE

MATERIALS TO ACHIEVE YOUR GOALS



CONCR3DE was founded on our desire to upcycle stone waste powders and create sustainable, inorganic, and functional 3D printing materials. Today, our binder jetting printers can do that, but our range of supported materials has expanded rapidly to include, for example, technical materials.

[CONCR3DE.COM](https://concr3de.com)

CONCR3DE CERTIFIED MATERIALS



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Our printer range supports a broad and expanding range of materials, including ceramics, stone, heat resistant, bio-based, and more. We offer specific binders to match virtually any material in powder form and can customize formulations and processes, supporting your requirements or research.

Ceramics

Silicon carbide

Material	Color	Bending str.	Density	Porosity	Shrinkage	Tconduct
CONCR3DE Silicon Carbide A (SiSiC)	Black	N/A	2,6-2,8 kg/l	0 %	0 %	N/A
CONCR3DE Silicon Carbide Carbon A (SiSiC)	Black	> 140 MPa	2,8-3,1 kg/l	0 %	0 %	> 150 W/(m·K)

Alumina

Material	Color	Bending str.	Density	Porosity	Shrinkage
CONCR3DE Alumina 99%	White	16-20 MPa (s)	1,7 kg/l (s)	55-59 %	X 4 %, Y 4 %, Z 6 %
CONCR3DE Alumina 80%	White	16-18 MPa (s)	1,5 kg/l (s)	53-55 %	X 4 %, Y 4 %, Z 5 %

Stone

Stone

Material	Color	Compr. str.	Flex. str.	Density	Porosity	Flammability
CONCR3DE Marble	White	12-31 MPa	2,8-5,8 MPa	1,7 kg/l	30 %	A2fl-S1
CONCR3DE Granite	Beige	12-31 MPa	2,8-5,8 MPa	1,7 kg/l	30 %	A2fl-S1
CONCR3DE Limestone	Gray	12-31 MPa	2,8-5,8 MPa	1,7 kg/l	30 %	A2fl-S1
CONCR3DE Concrete	Gray	18 MPa	2 MPa	1,6 kg/l	30 %	N/A

Refractory

Material	Cold crush str.	Mod. rupture	Compr. str.	Flex. str.	Density
CONCR3DE Refractory Cement	13 MPa / 1.000 °C	2,7 MPa	17 MPa	1 -2 MPa	1,5 kg/l

Bio-Based

Wood

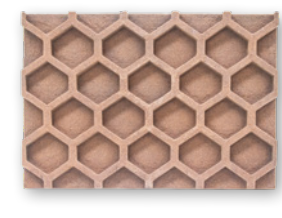
Material	Color	Compr. str.	Flex. str.	Tens. str.	Food safe	UV resistant
CONCR3DE Wood	Brown	50 MPa	35 MPa	30 MPa	Yes	Yes

Custom materials

The potential of our fully open additive manufacturing platform does not end with the existing material options. We invite material scientists to experiment with our hardware and software to create novel 3D printing materials. If you have a powder-based source, we will most likely be able to turn it into a printable material. Our team has extensive experience in binder technology, which has resulted in a wide range of pre-engineered binder options, including aqueous, solvent, UV, as well as inorganic and bio-based sustainable binders. Depending on the base powder material, our engineers are able to select or create the binder that fits your requirements.

Upcycling

CONCR3DE is dedicated to upcycling waste materials, whether bio-based or stone. You can now create value, in the form of sustainable, functional printed end-use products, from material streams that were previously deemed worthless - or even expensive to dispose of. Thanks to our 3D printers and binder options, you can now utilize otherwise wasted material, but also produce detailed and valuable objects with exceptional material properties. Through this innovative approach, you can minimize waste and showcase the potential of using waste materials to produce sustainable solutions. Contact our team to learn more.



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