

Carbstone

An endless cycle of
sustainability and reuse.

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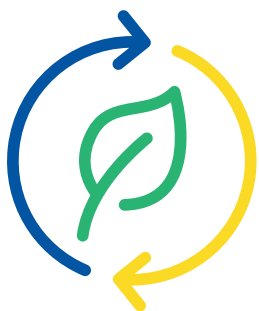
Our Carbstone blocks are CO₂-negative and will continue to absorb CO₂ even after production, continuing to grow stronger and harder, resulting in very strong walls. They are made from secondary raw materials (stainless steel slag) and remain 100% recyclable in their next life. Recycling produces only sand and gravel, making sand and gravel pits unnecessary in the future. The future begins here!

Carbstone in a nutshell



CO₂ negative

In the production of our Carbstone blocks, more CO₂ is absorbed than emitted. Moreover, they also extract CO₂ from the air afterwards, which they retain forever.



Cradle-to-cradle

In the production process, valorized slag is converted into workable material. This makes Carbstone building blocks 100% recyclable, time after time.



High compressive strength

Because the stones take CO₂ from the air even after processing, they become harder and harder. This results in walls with exceptionally high load-bearing capacity.

Carbonatation

An ancient but forgotten application

Carbstone emerged from the synergy of our decades of experience as a manufacturer of building blocks, valuable research insights from the Vito, as well as the expertise provided by our partner Orbix. Carbonatation is the natural process by which Ca-containing materials react with carbon dioxide and transform into calcium carbonate. That calcium carbonate, better known as limestone, is found worldwide in the subsurface and is a major source of natural CO₂ storage. Although the Romans already knew how to make clever use of this process, it disappeared into the background for a long time. Until recently, because of the demand for sustainable CO₂ storage, there was renewed interest in it from the industry.

In addition to CO₂, a source of calcium oxide is needed, in this case steel slag. These slags are a byproduct of the steel industry and have been recycled for years to recover the metal and gravel. What remained had no industrial use until recently. However, thanks to this patented process, by adding CO₂, it can now be used to produce high-quality and sustainable building materials.



Our CO₂ chamber is the beating heart of our Carbstone production. Here, the blocks are bound with CO₂ and subsequently cured. After 24 hours - depending on the size - they are ready for processing.

Applications

Endless purposes!

We offer varied options, including versions with insulating Climasono granules, for masonry, gluing, or precast walls. Also, our acoustic Soundblox, developed for better room acoustics, are now available in a Carbstone variant. For industrial, agricultural, and infrastructural purposes, we offer Carbstone stacking blocks, with a longer lifespan and higher fire resistance due to a unique production process. Additionally, we provide storey-high precast walls, the Masterwalls, now also with Carbstone technology.



Building Blocks



Soundblox



Stacking Blocks



Masterwalls



Realisations

Circular home, Ghent

Something special is in the making in Ghent and it has the potential to change the way we think about sustainable living. Talented local architect Stephan Monten is creating a unique private home built with our Carbstone building blocks, which are revolutionizing the construction industry. The process of building this home represents a new wave of environmental awareness in architecture. Keep an eye on this project – it just might be the future of sustainable living!

Scan me and stay updated on all our achievements!



It just might be the future of sustainable living!



Building block dimensions overview

Masonry blocks hollow

390x90x190	390x140x190	390x190x190	290x140x140
400x140x200	400x190x200	500x140x240	500x190x240

Masonry blocks full

290x90x190	290x140x190	290x190x190	300x200x100
290x90x90	290x90x190		

Masonry blocks Climasono hollow

390x90x190	390x140x190	390x190x190	290x140x140
400x140x200	400x190x200	500x140x240	500x190x240

Masonry blocks Climasono full

290x90x190	290x140x190	290x190x190
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Glue blocks

400x140x200	400x190x200	500x140x240	500x190x240
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Adhesive blocks Climasono

400x140x200	400x190x200	500x140x240	500x190x240
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Frequently Asked Questions



What happens when you drill the Carbstone blocks?

Nothing different from a classic concrete stone. The composition will not expand as a result of drilling. So the CO₂ remains trapped.



Is it healthy living in a building in which Carbstone blocks have been used?

Absolutely, the stone stores CO₂ and will continue to do so. However, this does not mean that he releases them into the home, rather that he binds more and more and thus becomes harder.



Are Carbstone blocks as strong as traditional masonry blocks?

Yes, they meet all the same specifications (see technical sheet). In addition, Carbstones - when placed outdoors - will continue to absorb CO₂, further hardening them and, consequently, making them stronger.



How much is the average delivery time?

The minimum curing time of the blocks is 24h, unlike traditional masonry blocks that require 3 weeks. Production time always varies according to order size. Contact us for more information.





Carbstone

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