

D-Carb®



CO₂ REDUCED WHITE CEMENT

CEM II/A-LL 52.5R

D-Carb by Cementir Group is a new umbrella brand for white low-carbon cements, supporting industry-wide decarbonisation efforts. The first product of its kind, a CEM II/A-LL 52.5R is produced in Aalborg.



AALBORG WHITE®

WHY CHOOSE D-Carb?



15% Lower CO₂ Emissions

D-Carb reduces emissions by 15% through an optimized clinker and limestone system with a fit-for-purpose grinding aids, lowering its carbon footprint.



Verified Sustainability

The reduced emissions are validated by third-party Environmental Product Declarations (EPD), ensuring product credibility.



Suitable Performances

D-Carb is the first white cement product in the market to combine a lower-carbon footprint with exceptional early age performance.



Energy Efficient Production

D-Carb incorporates waste heat recovery benefits from its clinker, enhancing sustainability in its manufacturing process.

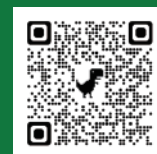
D-Carb®

HIGH PERFORMANCE, LOWER CO₂ FOOTPRINT.

**Compared to AALBORG WHITE CEM I 52.5 R*

D-Carb, a CO₂ reduced white cement, seamlessly facilitates the transition for industrial users towards more sustainable finished products while maintaining high standard of performance similar to Aalborg White CEM I 52.5R. It reduces CO₂ footprint by 15% compared to Aalborg White® CEM I 52.5R., offering stakeholders in the value chain a low-carbon building material solution aligned with sustainable building certifications.

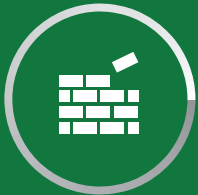
With its high standards of performances and consistent rheology, D-Carb enhances architecture aesthetics, particularly suitable for wet casting concrete with smooth surface and intricate finishes. Its extremely low alkali and chloride content ensure reliable quality and durability, while outstanding synergy with admixture ensures optimal performance of finished products. Additionally, its notably high early strength allows for meeting tight construction timelines.



Click or scan QR Code
to watch the D-Carb video



FEATURES AND BENEFITS



Smoothly transition to a more sustainable product

- Maintain high standard of performances at early ages of Aalborg White® CEM I 52.5R.
- High whiteness through meticulous selection of pure, light and readily available limestones.
- Enhanced and consistent rheology perfectly fits for producing smooth surface and complex finishes.
- Extremely low alkali and chloride content, attributed to the unique Aalborg White® clinker.
- Enhanced synergy and compatibility between cement and admixture, catering to a wide range of white cement applications.



Lowering carbon footprint of white cement finished products

- Lower-carbon white cement with 15% less CO₂ emissions compared to Aalborg White® CEM I 52.5R.
- Optimizing white clinker and high-quality limestones relative contents in the cement, by leveraging on fit-for-purpose grinding aid.
- Enhanced sustainability by implementing waste heat recovery system during the clinker production for district heating, benefiting 30.000 households at Aalborg plant.



Deliver lower carbon footprint material solutions aligned with sustainable building certifications

- The versatility of D-carb white cement enables it to achieve sustainable solutions across a wide range of finished products, including architecture concrete, decorative and functional dry mix mortar, paving and masonry tiles, cast-in-situ concrete and more.

PRODUCT OVERVIEW



The cement conforms to national / regional standards in the market served.

AALBORG WHITE D-Carb® CEM II/A-LL 52.5R.

Typical Production Value

Physical Properties	Strength(MPa)	1 day	21-27
		2 days	33-41
		28 days	56-66
	Initial Setting time	Mins	135-155
	Whiteness	Hunter L	92.5-93.5
Chemical Properties	Fineness	m ² /Kg	390-419
	SO ₃	%	2.3-2.5



Available Markets

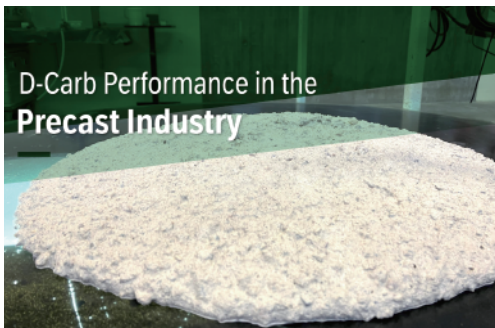
- All markets in Europe

Packages

- 25kg bags
- Big bags (1000kg & 1500kg)
- Bulk cement

APPLICATIONS

Suitable for all the industrial applications and specifically for wet cast concrete, semi-dry cast concrete, dry mix products, cast-in-situ concrete and special applications including traditional and innovative technologies.



In wet-cast applications such as self-compacting concrete, D-Carb's enhanced and consistent rheology, achieved through optimized limestone fineness and particle size distribution, enables a marble-like concrete finish while delivering early-age performance comparable to Aalborg White CEM I 52.5R.

Click or scan the QR Code to learn more about lab testing findings:

D-Carb Performance in the Precast Industry

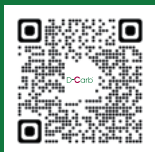


Acknowledging the critical importance of the synergy between cement and admixtures, extensive testing revealed no incompatibilities across various applications, using all leading market admixtures and collaborating with key producers. The testing program and the industrial tests at our customers' plant uncovered additional benefits in each application, including:

Application	Benefits	
Semi-dry cast concrete products	Carbon footprint Finishes and surfaces Pre-stability and edge solidity Density and strengths.	
Tile adhesive	Carbon footprint Consistency/ workability.	
Brick laying mortar	Carbon footprint Consistency/workability High early strength with balanced long-term strength.	
Wet-cast concrete products	Carbon footprint SCC robustness with less segregation and bleeding Less admixture.	

CONTACTS:

For technical matters and commercial inquiries related to the product, [click](#) or scan the QR Code to contact sales in your region.



For more information click or scan the QR Code to visit the [D-Carb website](#).



MADE IN DENMARK:

Aalborg Portland A/S
Rørdalsvej 44, 9220 Aalborg,
Denmark

DISCLAIMER:

THE HIGHEST CARE HAS BEEN TAKEN TO PROVIDE ACCURATE, UPDATE AND COMPREHENSIVE INFORMATION. HOWEVER, CEMENTIR HOLDING N.V. OR ITS AFFILIATES (THE "COMPANY") SHALL NOT BE HELD RESPONSIBLE FOR ANY CONSEQUENCES ARISING FROM ANY ERRORS OR OMISSIONS IN THE PUBLISHED MATERIALS NOR FOR ANY DAMAGE OR ACCIDENTAL LOSS RESULTING FROM THE USE OF THE INFORMATION HEREIN. THE COMPANY RESERVES THE RIGHT TO MODIFY, THROUGH DEVELOPMENT OF IMPROVEMENTS OR ELSE, THE PRODUCT DISPLAYED OR THE INFORMATION RELATED THERETO WITHOUT NOTIFICATION.

© 2024 Cementir Holding N.V. or its affiliates. All rights reserved.
Cementir, INBIND, RECOVER, FUTURECEM, AALBORG WHITE, D-CARB, INWHITE, AALBORG EXTREME and AALBORG EXCEL are the registered trademarks of Cementir or its affiliates.