You see a concrete structure.
We see a concrete opportunity
to fight climate change.

CarbonCure Concrete Technology
Recycling $\text{CO}_2$ to make simply better concrete

Information package for Design and Construction Community

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A Green Solution

WHAT

The CarbonCure Technology recycles CO₂ to reduce the carbon footprint of concrete, creating affordable and more sustainable concrete mixes.

HOW

- The CarbonCure Technology is retrofitted into existing Central Concrete plants.
- Carbon dioxide (CO₂) gas is sourced from the smokestacks of local industrial emitters.
- The purified CO₂ gas is delivered in pressurized vessels to the concrete production facility by commercial gas suppliers.
- CarbonCure’s proprietary delivery system precisely injects the CO₂ into the concrete mix.
- The CO₂ is chemically converted into solid calcium carbonate, which is permanently embedded within the concrete.

IMPACT

- By partnering with CarbonCure, Central Concrete recycles the waste CO₂ as a fresh concrete ingredient. This allows the cement content of the mix to be reduced without sacrificing compressive strength, while also reducing the overall carbon footprint and global warming potential (GWP).
- Central Concrete’s ready mix products have the same color, finish and workability.

LEED

CarbonCure’s technology allows architectural teams to contribute towards Material and Resources credits under LEED v4.

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<tr>
<th>Number of Points</th>
<th>LEEDv4 credits</th>
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<tr>
<td>Material &amp; Resources</td>
<td>5 points</td>
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→ Up to 5% reduction in global warming potential (GWP) using the CarbonCure Technology as outlined in an EPD.
Central Concrete reduced the carbon footprint of its mix designs and maintained the compressive strength requirements by adding recycled CO₂ and reducing the total cementitious materials.

PROVEN RESULTS

- Maintain the same concrete performance with reduced carbon footprint.
- Boost early-age strength of concrete.
- Thorough evaluation conducted by U.S. Concrete’s National Research Laboratory.
- No change to pumping, placing and finishing.

SAME RELIABLE CONCRETE . . . Now with Recycled CO₂

**15% Cement Replacement Mixes with Recycled Carbon Dioxide Added**

<table>
<thead>
<tr>
<th>Age (Days)</th>
<th>Original Mix</th>
<th>Optimized Mix (5% Less Cementitious + CarbonCure)</th>
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**50% Cement Replacement Mixes with Recycled Carbon Dioxide Added**

<table>
<thead>
<tr>
<th>Age (Days)</th>
<th>Original Mix</th>
<th>Original Mix + 1.8 oz/cwt CarbonCure</th>
<th>Original Mix + 2.4 oz/cwt CarbonCure</th>
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CUSTOMER RESOURCES

GENERAL RESOURCES
Visit:
• www.centralconcrete.com
• www.carboncure.com

TECHNICAL LIBRARY
Contact Central Concrete to secure additional technical data, along with the CarbonCure spec language for your ready mix specifications.

AIA PRESENTATION
Learn more on how you can reduce the carbon footprint of concrete. You will earn 1 AIA HSW learning unit after completing “Architectural Initiatives to Reduce the Carbon Footprint of Concrete”. AIA #40107569. Course #CCT00000001.

LUNCH & LEARN
Arrange a Lunch & Learn today.

Want to learn more? We offer a myriad of Lunch & Learns covering such topics as:

- Advances in the development of low carbon, green mixes
- Carbon sequestration
- Recycled concrete aggregate
- Returned fresh concrete
- Environmental Product Declarations
- High strength mixes: Taking on the challenges of today’s tall buildings
- Engineering concrete mixes to meet your needs: High strength, Low deflection, high MOE, low shrinkage, self-consolidating concrete, long-distance pumping
- High early strength: Responding to accelerating construction schedules
- Rapid drying concrete: Preventing costly flooring failures
- Flowable mixes: Reducing in-place costs; improving advances in maturity testing; monitoring concrete temperature and strength in real-time

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