

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



### **CarbonCure Concrete Technology**

Recycling CO<sub>2</sub> to make simply better concrete

Information package for Design and Construction Community

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## **CARBONCURE** A Green Solution

#### WHAT

The CarbonCure Technology recycles  $CO_2$  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 (CO<sub>2</sub>) gas is sourced from the smokestacks of local industrial emitters.
- The purified CO<sub>2</sub> gas is delivered in pressurized vessels to the concrete production facility by commercial gas suppliers.
- CarbonCure's proprietary delivery system precisely injects the CO<sub>2</sub> into the concrete mix.
- The CO<sub>2</sub> is chemically converted into solid calcium carbonate, which is permanently embedded within the concrete.

#### IMPACT

- By partnering with CarbonCure, Central Concrete recycles the waste CO<sub>2</sub> 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.

	Number of Points	LEEDv4 credits
Material & Resources	5 points	MRc1, MRc2
Up to 5% reduction in the CarbonCure Techn	global warming potential lology as outlined in an EP	

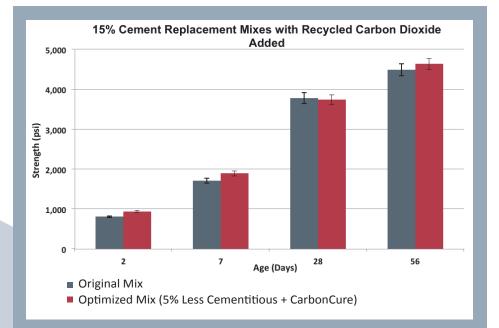
# **SAME RELIABLE CONCRETE** ... Now with Recycled CO<sub>2</sub>

• Maintain the same concrete performance with reduced carbon footprint.

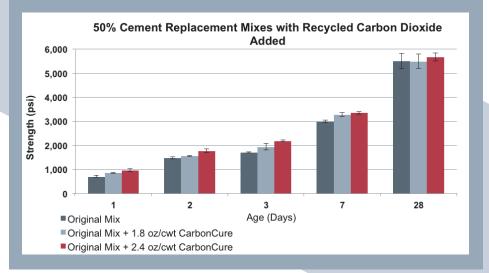
## Boost early-age strength of concrete. PROVEN RESULTS Thorough evaluation conducted by

- Thorough evaluation conducted by U.S. Concrete's National Research Laboratory.
- No change to pumping, placing and finishing.

Central Concrete reduced the carbon footprint of its mix designs and maintained the compressive strength requirements by adding recycled CO<sub>2</sub> and reducing the total cementitious materials.







## **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 #CCT000000001.
LUNCH & LEARN	Arrange a Lunch & Learn today.
	Contact: Juan Gonzalez Sustainability Man

## 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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