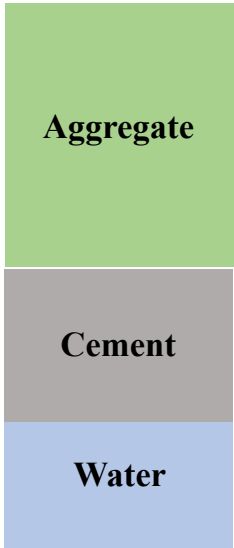
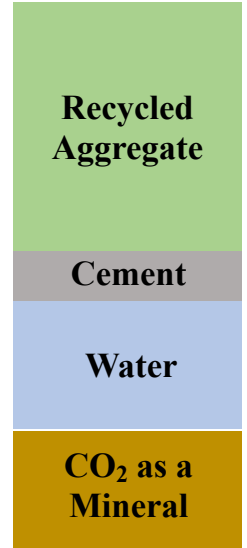


**Standard Concrete**



# Sustainable Concrete and Its Current Stance in the Construction Industry

**Carbon Infused Concrete**



Concrete is the second most consumed resource used in the world and the production of concrete, mainly the production of cement, contributes to over 8% of the world's CO<sub>2</sub> emissions. Sustainable concrete is rapidly surfacing within the construction industry as environmental issues and concerns like global warming and climate change continue to worsen. Scientists have been and continue to consistently conduct studies to test if sustainable concrete is a possible solution to reducing CO<sub>2</sub> and greenhouse gas emissions that come from the construction industry. Some construction companies have concerns that changing the composition of the standard concrete could potentially pose risks to the integrity of such an already structurally sound building material. This report will get a gauge on where sustainable concrete stands within the construction industry.

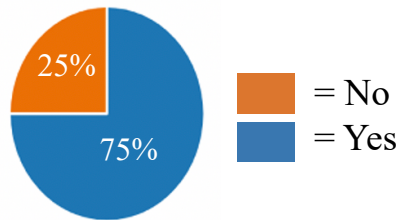
**Keywords:** sustainable, concrete, cement, construction, CO<sub>2</sub> emissions

## What is Sustainable Concrete?

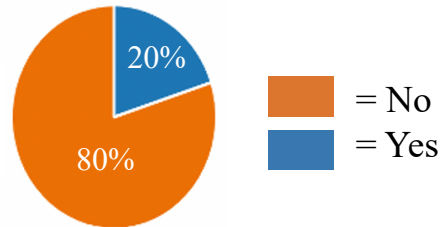
A type of concrete that recent studies have proven to have lower environmental impacts than the standard concrete due to reduced emissions of CO<sub>2</sub> and greenhouse gases.

**EX:** Carbon Infused Concrete, Using Recycled Materials as Aggregate, Ashcrete, Sustainable Ready- Mixes

Have you heard of Sustainable Concrete?



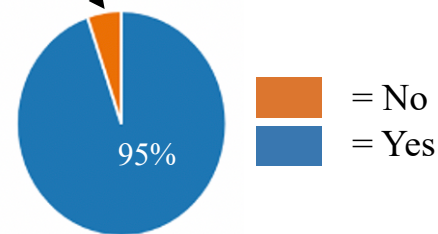
Have you ever used Sustainable Concrete on a project?



4 Survey Participants had Previously Used Sustainable Concrete Which Included:

- Type 1L Limestone Cement
- Embodied Carbon Concrete
- Orca Aggregate
- CarbonCure
- Infused Concrete

Would you be willing to try using it on a project?



Main Reasons Why Companies Have Not Used Sustainable Concrete

1. Not Enough Knowledge About the Material
2. Pricing/Cost
3. Durability/Strength Concerns

## What's Next?

- Continue conducting research about its structural capabilities
- Implement these products on smaller aspects of projects to see how it performs

**Morgan Gawle**

California Polytechnic State University, San Luis Obispo  
morgangawle@gmail.com