

THOMAGREEN®

Concrete with lower CO₂ emissions than conventional concrete



PRODUCT DESCRIPTION:

THOMAGREEN® is a family of concrete products utilizing recycled materials or sustainable technologies to reduce CO₂ emissions below the levels of conventional concrete.

APPLICATIONS:

- Industrial Floor Slabs
- Residential Slab on ground
- Slab on metal deck
- Low, Mid and High rise construction
- THOMAGREEN can be used in almost any application, Athletic court, Pools, Driveways, etc

BENEFITS:

- Improvement of carbon footprint by reducing amount of greenhouse gases
- Lower life cycle/maintenance costs
- Contribution to sustainable building certifications (LEED, Living Building Challenge, etc)
- Better Solar Reflectivity (Less Heat Island Effect)
- Reduced lighting requirements
- Improved durability, sulfate resistance and permeability

MATERIALS:

- CarbonCure™ Technology*
- Slag cement
- Fly Ash
- Recycled water
- Recycled concrete aggregate
- Chemical admixtures

*Read more about CarbonCure on page 3

FINISHING:

- Normal finishing process for the application

Contact us about THOMAGREEN® and how you can reduce CO₂ emissions in your project.

Contact details can be found on our website under CONTACT.

Ask us about our Products and Services.



1. What products are considered Thomagreen products?

– Any concrete product with a lower carbon footprint than conventional concrete mixtures.

2. Are products with fly ash considered Thomagreen?

– Yes. Since fly ash is a byproduct of a coal burning power plant it is considered a recycled material. Because of the strength gaining characteristics of fly ash in concrete we are able to produce equal strengths while using less Portland cement which reduces the carbon footprint.

3. Are products with slag cement considered Thomagreen?

– Yes. Slag is a byproduct of the steel making industry so it is also considered a recycled material. When properly quenched slag is ground into a powder to make slag cement it has strength gaining properties even better than Portland cement so its use can greatly reduce the need for Portland cement.

4. Why is Portland cement reduction so important for lowering the carbon footprint of a product?

– Since the production of Portland cement is responsible for about 5% of Carbon Dioxide emissions into the atmosphere any mix optimization resulting in the need for less of it in concrete is environmentally beneficial.

5. Is Thomas Concrete looking into other ways to reduce Carbon Dioxide emissions?

– Yes. We utilize our in-house concrete labs to evaluate materials and admixtures that may allow us to reduce cement contents. Since February 2016 we have been using Carbon Cure Technology at some of our plants to convert Carbon Dioxide gas into a mineral while also allowing us to reduce cement contents. By using this technology we have reduced potential Carbon Dioxide emissions by tens of thousands of tons.

6. Are Thomagreen products restricted from use in any applications?

– A Thomagreen product can be used or developed for practically any application. Some specifications may be written that will impede or negate the possibility of using a Thomagreen mix. Please provide any contract documents to Technical Services to make sure we meet specifications and address any possibilities.



THOMAGREEN®

(CarbonCure™)



PRODUCT DESCRIPTION:

THOMAGREEN® (Carbon Cure™) – family of concrete products utilizing Carbon Cure technology CO₂ injection for improved concrete characteristics. This Thomagreen mix mineralizes CO₂ as well as allowing for reduced CO₂ emissions from cement clinker production.

APPLICATIONS:

- This technology can be used for all concrete applications
- Residential mixes
- Standard commercial mixes
- Specified projects where approved

MATERIALS:

- CO₂ injection into normal concrete mixtures

BENEFITS:

- Improvement of carbon footprint by reducing amount of greenhouse gases
- Improved concrete strength
- Reduced Portland Cement contents
- No effect on air content or slump included in our THOMAGREEN family.

FINISHING:

- Normal finishing process for the application

Carbon Cure mixes are a part of our THOMAGREEN® family of products which could also include recycled materials such as fly ash or slag cement.

Ask your Thomas Concrete representative about other solutions.
All details can be found on our website under CONTACT.

