

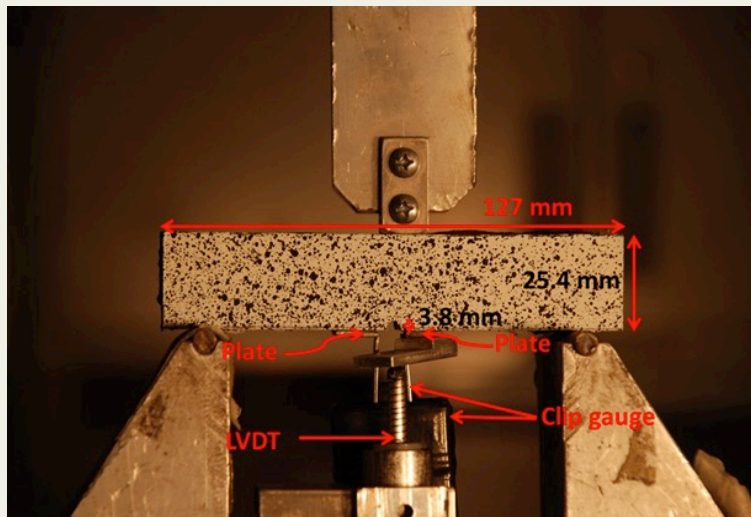


Ferrock Basics

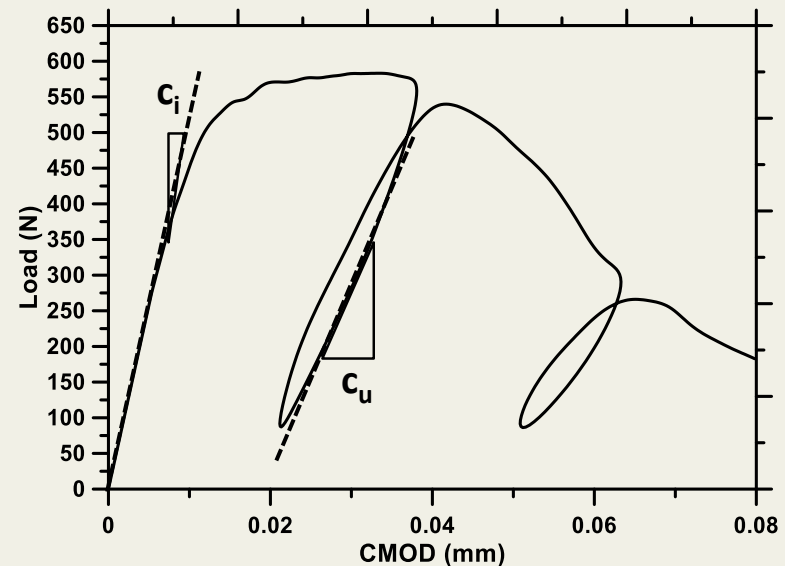
David Stone, PhD

Status of FerroRock

- One patent, one application, one provisional
- Five scientific papers on characteristics
- Basic testing on strength and other qualities
- Prototype products and demonstration structures



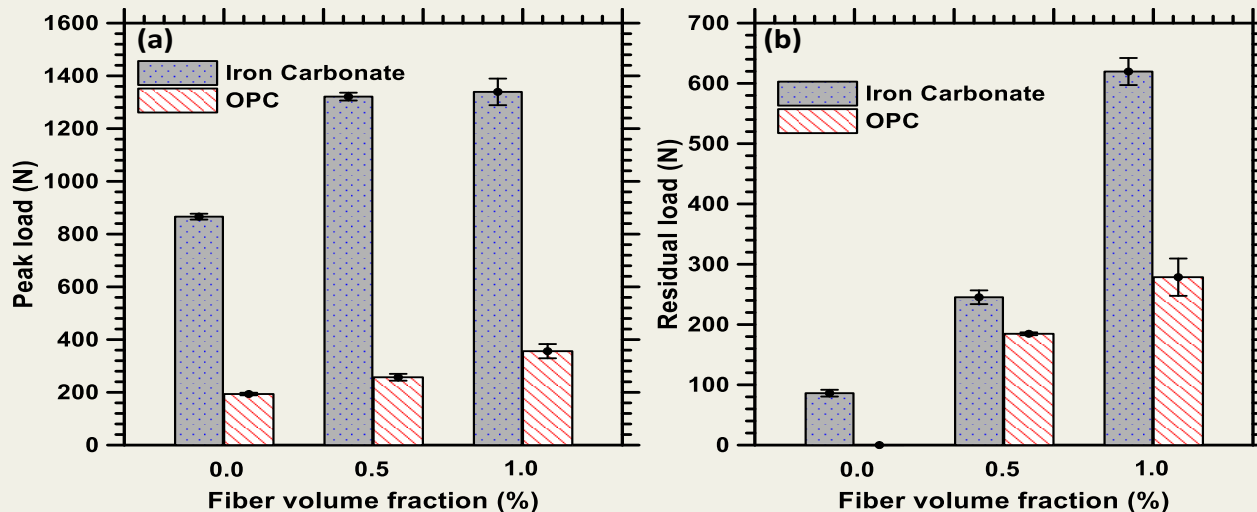
(a)



(b)

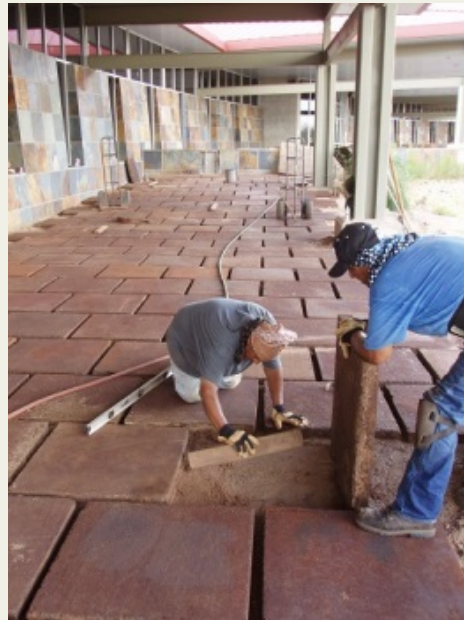
Comparison with Portland Cement

- Higher compressive strength
- Greater flexural strength
- Better crack resistance
- Resists high heat much better
- Lower cost at large scale operations



Potential Product Applications

- Blocks, pavers, tiles, other small modular units
- Walls, slabs, roofs, and columns
- Structural panels, thin shells, and backer sheets
- Pipe, culverts, vaults and other precast products



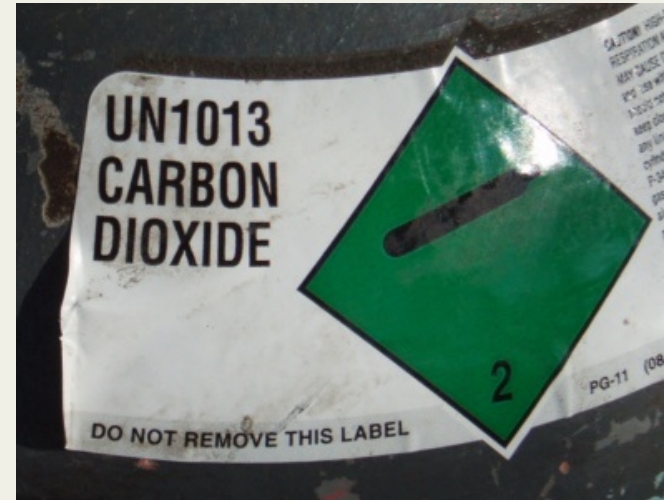
Ferrock's Green Qualities

- Recycles steel dust as its iron source
- Recycles fly ash as its silica source
- Captures CO₂ during hardening
- Releases hydrogen as by-product



Methods of CO₂ Capture

- Pre-cast products in a gas-filled autoclave
- Pumping through embedded perforated pipes
- Injecting under pressure into a wet mix
- Mixing in saturated CO₂ adsorbent



SCHEMATIC DIAGRAM OF THE IRON CARBONATE PROCESS AT AN EXISTING PLANT

