

Ozinga has developed a series of lower embodied carbon concrete mix designs for a variety of specified strengths. By utilizing design of experiment analysis in conjunction with Concrete AI™, Ozinga has been able to reduce the time-to-market for these mix designs. The entirety of this work has been completed in Ozinga's own AASHTO/CCRL certified research and development lab. With each specified strength, there is an increase in carbon reduction from the National Ready Mix Concrete Association regional baseline as well as a reference guide showing the effect on performance criteria.

		CEMENT REPLACEMENT			
		30% CARBONSense [®]	50% CARBONSense [®] PLUS	70% CARBONSense [®] ULTIMATE	
NO AIR	3000 PSI	GWP	120	96	74
		NRMCA GREAT LAKES REGION	195	195	195
		% DIFFERENCE OZINGA/GREAT LAKES	-38%	-51%	-61%
	4000 PSI	GWP	144	115	86
		NRMCA GREAT LAKES REGION	231	231	231
		% DIFFERENCE OZINGA/GREAT LAKES	-38%	-50%	-63%
	5000 PSI	GWP	154	123	92
		NRMCA GREAT LAKES REGION	278	278	278
		% DIFFERENCE OZINGA/GREAT LAKES	-45%	-56%	-68%
	6000 PSI	GWP	161	128	95
		NRMCA GREAT LAKES REGION	293	293	293
		% DIFFERENCE OZINGA/GREAT LAKES	-45%	-56%	-67%
FULL AIR	3000 PSI	GWP	160	100	76
		NRMCA GREAT LAKES REGION	195	195	195
		% DIFFERENCE OZINGA/GREAT LAKES	-18%	-49%	-61%
	4000 PSI	GWP	151	121	76
		NRMCA GREAT LAKES REGION	231	231	195
		% DIFFERENCE OZINGA/GREAT LAKES	-35%	-48%	-61%
	5000 PSI	GWP	170	135	99
		NRMCA GREAT LAKES REGION	278	278	278
		% DIFFERENCE OZINGA/GREAT LAKES	-39%	-51%	-64%
	6000 PSI	GWP	178	142	105
		NRMCA GREAT LAKES REGION	293	293	293
		% DIFFERENCE OZINGA/GREAT LAKES	-39%	-52%	-64%

The CarbonSense[®] Series utilizes CarbonCure™ technology in all mix designs as well combining other materials, technology and admixtures to take it to the next level of carbon reduction.



Mixes were designed to match in laboratory conditions. Set times vary.
Comparisons based on GWP values from Ozinga Chinatown Yard. GWP values for any Ozinga location available upon request.

Contact for further detailed information for on-demand 3rd party verified EPD's carbonsense@ozinga.com.

