CEMATRIX™
Lightweight Fill Solutions

CEMATRIX Cellular Concrete Compared to Industry Standards

The following table presents a comparison of CEMATRIX Cellular Concrete to industry standards.

Cellular Concrete Class	Maximum Cast Density		Industry Standard Minimum Compressive Strengths*		CEMATRIX Minimum 28-day Compressive Strength	
	kg/m³	pcf	MPa	psi	MPa	psi
I	385	24	0.07	10	**0.3**	**43**
II	480	30	0.28	40	**0.5**	**72**
III	575	36	0.55	80	**1.0**	**145**
IV	675	42	0.83	120	**1.5**	**217**
V	800	50	1.10	160	**2.5**	**362**

*** As per American Concrete Institute (ACI) publication "Guide for Cast-in-Place Low Density Cellular Concrete" ACI 523.1 R-06**

The following tables present quality control data from three example projects. A review of the data indicates highly consistent densities and compressive strengths that greatly exceed the minimum requirements. These industry-leading results are achieved through extensive materials research & development, skilled quality control and operations staff, and cutting edge production equipment.

Summary of CEMATRIX Quality Control Data for Selected Projects						
Parameters	Illinois Water Reclamation Plant Lightweight Fill		Manitoba Bridge Approach Lightweight Fill		Ontario Roadway Lightweight Fill	
	Density (kg/m³)	f'_c (MPa)	Density (kg/m³)	f'_c (MPa)	Density (kg/m³)	f'_c (MPa)
Specified Requirement	425 +/-10%	0.40 min. @28-days	425 +/-10%	0.40 min. @28-days	475 +/-10%	0.50 min. @28-days
Minimum	400	0.88	415	0.99	441	1.05
Maximum	448	1.62	430	1.38	456	1.69
Average	415	1.17	424	1.18	447	1.37
Standard Deviation	11	0.14	5	0.11	4	0.12