Concrete Parking in Practice

Concrete Parking in Practice is a series of publications from the Maryland Ready Mix Concrete Association (MRMCA) to help specifiers become more familiar with design and benefits of concrete parking lots.

CPIP No. 3 LEED - Recycled Content

Slag Cement and Fly Ash

Slag cement and fly ash are the two most common SCM's (Supplementary Cementitious Materials) used in concrete. Most concrete produced today includes one or both of these materials. For this reason, their properties are frequently compared to each other by mix designers seeking to optimize concrete mixtures.

LEED Credits

Leadership in Energy and Environmental Design (LEED) is a system developed by the United States Green Building Council to rate a building's environmental performance. This system has become the principal method by which buildings can achieve green building certification. The system is based on credits earned in five major categories. Slag cement and fly ash can positively impact several credit categories including:

- Site credit for reduction of heat islands: Use of high-albedo materials like concrete produced with slag cement.
- Materials credit for building reuse: Slag cement makes concrete structures more durable.
- Materials credit for recycled content: Slag cement and fly ash is a recycled material used in concrete.
- Materials credit for use of local/ regional materials: Slag cement and fly ash can be considered a local material in many areas.

Substituting fly ash for Portland cement is another way to make concrete greener. Fly Ash is a pozzolan and a byproduct of coal combustion for electric power facilities. Fly Ash is normally used in quantities between 15 and 25 percent as compared with substantially higher substitution levels for slag cement (which is hydraulic cement).

References
1. ECCO EV27. LEED Green Building Rating System and Concrete, Environmental Council of Concrete Organizations, Skokie, IL, 2002.

2. SCA – Slag Cement Association.

What is the next step?

The MRMCA provides an AIA-approved parking lot design class that may be used for Professional Development Hours (PDH's). We also participate in a national Design Assistance Program (DAP) and we cover the costs of the first project within the state of Maryland. Depending on project specifics, we will offer additional DAP projects at little or no cost. All we need are the current CAD drawings and a few pieces of project information. Contact us for more details.

Maryland Ready Mix Concrete Association
PO Box 617 • Frederick, MD 21705 • info@MarylandConcrete.com • 866-367-2662 (866-FOR-CONC)