FGS PermaShine
The new face of polished concrete

NEWS RELEASE

FGS PermaShine Adds Beauty and Energy Efficiency to LEED Certified Projects

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OMAHA, Neb. – Building teams can gain points toward LEED certification of a building project with the FGS/PermaShine polished concrete process through the LEED for New Construction and Major Renovations Version 2.2 Green Building Rating System.

Building teams seeking LEED certification for their design strategies through this leading national standard developed by the US Green Building Council (USGBC) should consider the manufacturing process, materials and installation process of the specified building materials in order to gain points toward certification.

FGS/PermaShine Polished Concrete (MasterFormat Section 033500 Concrete Finishing, and/or 030130 Maintenance of Cast in Place Concrete) is a patented dry method of concrete floor or concrete surface restoration using the process of grinding a concrete surface to be resurfaced while extracting and retaining dust during the grinding process. This polished concrete process can contribute points toward LEED-NC and LEED-EB certification in the following design categories:

MR (Materials & Resources) Credits 1.1, 1.2 & 1.3 - Building Reuse (1 point each)
In projects where the concrete flooring comprises more than 75 percent to 95 percent of the materials in the original building, the FGS/PermaShine process may assist a building team with points toward LEED-certification of a major renovation. These projects can include buildings with large expanses of concrete floor that can be reused such as in warehouses or retail showrooms. This product (or process) also can reduce impacts from construction or demolition, because the polished concrete process involves resurfacing of an existing concrete floor, and the elimination of demolition. Depending on the size of the floor, this process may also contribute to maintaining 50 percent of the interior non-structural elements and therefore extend the life cycle of the building's existing flooring materials.

EA (Energy & Atmosphere) Credit 1: Optimize Energy Performance (1-10 points)
A concrete floor with FGS/PermaShine can be part of a whole building approach to maximize the energy efficient design because of the thermal mass of a concrete floor and the reflective finish of the FGS/PermaShine process. The thermal properties of concrete floors can reduce the cooling and heating loads within a building envelope and the energy required for lighting interiors can be reduced with a reflective floor process. The number of LEED points available in this section of the Green Building Rating System will depend on the area of the building with concrete flooring. For example, if the building team can document that the concrete floor has increased the energy efficiency of a building by 10.5 percent over the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2004, then LEED-NC awards 1 point. Theoretically, 10 points could be awarded for a 42 percent increase in energy efficiency.

MR (Materials & Resources) Credit 3.1, 3.2- Material Reuse: 5%, 10% (1 point)
Polished concrete allows building teams to gain LEED points by refurbishing permanently installed concrete flooring, because this strategy reduces the demand and impact of extracting and processing raw materials. To gain the points, the project should utilize existing materials that cost at least 5 percent and up to 10 percent of the total materials on the project.

EQ Credit 4.1: Low-Emitting Materials: Adhesives & Sealants (1 point)
FGS/PermaShine can reduce the quantity of indoor air contaminants that are odorous, irritating and harmful to the comfort and well-being of installers and occupants of a building. The chemical teatments in FGS/PermaShine are VOC-free comply with South Coast Air Quality Management District (SCAQMD) Rule #1168 and do not exceed the VOC content limits established in SCAQMD Rule #1113, Architectural Coatings.

The above LEED credit section references are for suggested applications of FGS/ PermaShine. The LEED applicant is ultimately responsible for determining the product attributes that will help provide LEED-certification of a building project.

Under the LEED-NC categories suggested, FGS/PermaShine can assist building teams in obtaining up to five LEED points, as long as the overall design meets or exceeds the LEED building performance standards.

FGS/PermaShine can also potentially assist in gaining points in other LEED Green Building Rating Systems, including LEED for Existing Buildings, LEED Core and Shell, LEED for Homes as well as others still under development, such as LEED for Schools, LEED for New Retail construction, and LEED for Healthcare, among others.

It takes a minimum of 26 points to gain LEED Certification for a building, in addition to meeting several prerequisites. The additional points needed for LEED certification in buildings using FGS/PermaShine can be gained in other categories, including sustainable site and water efficiency.

While LEED is the national benchmark for sustainable design and construction, FGS/PermaShine will also help building teams comply with many other "green" building standards, including the Green Building Initiative's Green Globes and various other national and regional standards.

Call L&M Construction Chemicals for more details on how FGS/PermaShine can qualify for "green" building standards at 800-362-3331 or visit www.lmcc.com or www.fgs-permashine.com.

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