



# **APF TECHNICAL BULLETIN**

## **APF LEED CREDIT INFORMATION**

***OCTOBER 2017***

### **HIGH PERFORMANCE CONCRETE COATINGS**

**Arizona Polymer Flooring**. 4565 W. Watkins St . Phoenix, AZ 85043 . Ph: 623.435.2277 OR 1-800-562-4921. Fx: 623.435.8585 . [www.apfepoxy.com](http://www.apfepoxy.com)

# **LEED Credit Information**

Arizona Polymer Flooring (herein APF) polymers and cementitious products/systems are more sustainable than most other finishes. They require lower maintenance, they cure to a virtually inert and non-polluting (odor abatement, vapors and dust) indoor air quality, and the polymer products are a non-food source for microorganisms, which means they are innately antimicrobial. In addition, APF recycles the dust and solvent that may be a byproduct of the manufacturing process.

APF products may contribute to potential LEED Credits in the construction of new facilities and renovation of existing facilities. APF polymer and cementitious products were “green” a long time before “green” became an everyday term in the construction industry. Most APF materials cure to a virtual inert finish. Meaning they are excellent finishes when “indoor air quality” and “odor abatement” are desired.

**LEED Compliance Information:** There are two primary issues that the Specifier or Owner will want to know about Materials and Resources:

1. **Material Information** – LEED Certification and Credit Eligibility is listed in the next couple of pages. To earn LEED certification, the applicant project must satisfy all the prerequisites and a minimum number of points to attain a LEED rating level.
2. **Raw Material Extraction Location** – Different than APF Regional Manufacturing, this category is focused on the raw material extraction location, such where does the epoxy resin come from. It sounds like an easy question, however APF has several different raw material sources, which can change based on availability, pricing, etc. Since there are so many variables, APF can only provide a Certificate of Compliance for the raw material extraction location(s) at the time an actual order is inhouse. Some of APF competition misrepresent the Raw Material Certificate of Compliance by stating that their raw material location has stayed the same since 2009, which is false. APF refuses to do that.

## **LEED Credits**

LEED Credits are unique per the project. As examples:

1. The rehabilitation of an existing building will qualify for different LEED Credits vs. a brand-new building.
2. Regional Manufacturing or manufacturing within 500 miles of Phoenix, Arizona qualifies for the Credit, however Buffalo, New York will not qualify.

The AIA Certified Architect will gladly accept the list below and they will sort out what Credits they require.

# **LEED Credit Information**

## **MRcr1.3 Building Reuse Credit (Potential 1 Point)**

APF polymer and cementitious coating and flooring systems sustainability is normally forecasted at the life of the structure itself. The interior/exterior wall coatings and flooring surfaces are used to restore an existing facility to its original design. They extend the life cycle of existing facility usually to its projected design life. In many renovation projects, the original coating or flooring systems can be restored to their original luster following inexpensive repairs and/or refinishing of the coating or floor. Restoring them, conserves resources, reducing the waste and the environmental impact, while providing long term sustainability. While it contributes towards MRcr1.3 LEED credits.

## **MRcr5.1 and 5.2 Local Regional Materials Credits (Potential 2 Points)**

APF polymer and cementitious flooring and coating systems are finished manufactured on the jobsite. One point is awarded if 10% of the project building material is manufactured within a 500-mile radius of the project. Since the polymer and cementitious coating and surfacing systems incorporate several different raw material components, often from different manufactures, they comply. In addition, raw materials, such as aggregates, are often extracted, harvested or recovered within a 500-mile radius of the project. The calculation is based on the cost of the raw materials. The beach sand, as well as the cement and polymer binders are available throughout the United States. These systems can contribute to the credit if the raw material supplier is located within 500 miles of the project site and is manufactured on site. A second point is awarded if the total percentage of the cost of regional materials is at least 20%. APF has plants located in California, Arizona and Texas which can contribute to points if the material suppliers are located within 500 miles of the project site and contributes towards MRcr5.1 and 5.2 LEED credits.

## **EQcr4.1 Indoor Emitting Materials Credit 4.1 (1 point possible)**

APF cementitious based systems are a combination of inorganic powder and aggregate and organic based binders containing limited to zero volatile organic compounds (VOC). APF polymer and cementitious flooring and coating systems have, for the most part, moved to 100% solid formulas, eliminating the addition of any VOC's in the material. In addition, a number of APF polymer and cementitious flooring and coating systems are silica free. Certification of compliance may be obtained from APF.

## **IEQc4.1 Low Emitting Materials (1 point possible)**

APF has a number of cement based products that are inorganic with organic co-polymer additives that contain no VOCs. As a manufacturer of polymer and cement systems APF has a full complement of products and systems that comply with every federal, state and regional requirement. The vast majority of epoxy and polyurea materials are 100 percent solid formulas. The elimination the VOCs in the products and systems means that they contribute towards IEQc4.1 LEED credits.

# **LEED Credit Information**

## **IEQc4.3 Low-Emitting Materials (1 point possible)**

APF products and systems qualifies for LEED Points when sealers do not contain VOCs in excess of state or regional limits. Sealers used in finishing floors will generally comply. For schools, flooring elements must meet testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers. Generally, epoxy and urethane products will comply and contribute toward IEQc4.3 LEED credits.

## **IDc1 “Innovation in Design” (1 point possible)**

APF products and systems qualify for LEED Points awarded under the Innovation in Design category for innovative performance in categories not specifically addressed by LEED or for achieving exemplary performance in an established LEED credit.

**LEED® (Leadership in Energy and Environmental Design) Rating System is a registered trade name of USGBC (U.S. Green Building Council)**

### **Disclaimer:**

APF Technical Guidelines are developed in good faith for the sole purpose of assisting others with products, systems and industry standards. The information published herein is gathered from different sources that are thought to be reliable, but the reader should not assume that the information absolves the reader from validating information from other sources, such as listed below, before making a decision. Since information from others can change without notice, APF cannot be held at fault if any of the information conveyed in good faith is deemed in error.

## **HIGH PERFORMANCE CONCRETE COATINGS**

Arizona Polymer Flooring. 4565 W. Watkins St . Phoenix, AZ 85043 . Ph: 623.435.2277 OR 1-800-562-4921. Fx: 623.435.8585 . [www.apfepoxy.com](http://www.apfepoxy.com)