

## AkzoNobel Sign Finishes and LEED® Certification

### What is LEED certification?

In 2000 the United States Green Building Council (USGBC) released a new green building certification system called LEED or Leadership in Energy and Environmental Design.

Building owners and operators who wish to contribute to sustainable building practices can use LEED as a framework to identify and implement practical and measureable green building design, operations, construction and maintenance solutions (USGBC LEED 2009)

To achieve LEED certification, the LEED project team must document conformance with LEED criteria. Points for specified criteria feed up into credits in six categories: sustainable sites, energy and atmosphere, water efficiency, indoor environmental quality, materials and resources and innovation. Each credit is allocated points based on the relative importance of the building-related impacts that it addresses. The number of points a project earns determines the level of LEED certification a project is awarded.

As providers of architectural coatings, Sign paint suppliers and applicators are frequently requested to provide information and documentation on how their products might contribute to LEED points.

### Sign Finishes and LEED

There are three LEED credits where Sign Finishes paint and LEED might intersect:

#### **Recycled content (Materials and Resources, Credit 4)**

*Use materials with recycled content such that the sum of the postconsumer recycled content plus ½ of the preconsumer content constitutes at least 10% or*



*20%, based on cost, of the total value of the materials in the project (USGBC LEED 2009)*

- Most paint products (including Sign Finishes) do not contain recycled material and therefore Sign Finishes is unable to contribute to this credit. In the context of the total value of the building, even if sign paint was 100% recycled, the contribution would be insignificant.
- AkzoNobel supports the LEED goals of “Reduce, Reuse, Recycle” in our own business practices. AkzoNobel has rework and recycling programs in place at all of our manufacturing locations to reduce environmental impact from manufacturing, packaging and waste products.

#### **Regional Manufactured or Extracted Materials (Materials and Resources, Credit 5)**

*Use building materials or products that have been extracted, harvested or recovered, as well as manufactured within 500 miles of the project for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) can contribute to the regional value.*

- Sign Finishes products are highly formulated and globally sourced, therefore documenting individual raw materials as required for this

credit is not possible at this time. Sign Finishes is unable to contribute to this credit.

- Points for Credit 5 are generally obtained from large structural items such as lumber, steel and concrete. If a project is located within 500 miles of Pontiac MI, Sign Finishes paint could theoretically contribute to regionally manufactured material credit. However, once again, the threshold for this credit is 10% of the total material cost of the building. The cost of paint on a sign is insignificant in this context.

### **Low Emitting Materials – Paints and Coatings (Indoor Environmental Quality Credit 4.2)**

LEED points for Low VOC emitting materials apply only to Indoor surfaces. Exterior Signs and sign paint are therefore excluded from consideration. Interior signs are also typically excluded if they are produced in a Sign shop manufacturing environment and subjected to full cure before installation.

### **Volatile Organic Compounds**

Volatile Organic Compounds (VOCs) can be broadly defined as chemicals that evaporate and enter the air

as gas under room temperature conditions. Scents and other odors are common examples of VOCs. VOCs include both naturally occurring chemical compounds, such as methane, and man-made compounds such as paint solvents and thinners which evaporate into the air as paint dries or cures.

There are thousands of products in everyday use that emit VOCs indoors and into the environment. Human exposure to VOCs is highest indoors where concentrations are highest. VOC released into the atmosphere may contribute to ground level ozone, forming smog.

Man-made VOCs are regulated by law through various agencies including EPA, OSHA, and State and Local regulations. LEED focuses on Indoor Air Quality (Indoor Environmental Quality Credit) where VOC concentrations and adverse human health impacts can be highest.

Due to their photochemical effect, many VOCs react with sunlight to form precursors to smog. Certain solvents used in paint products have been identified by EPA to have negligible photochemical effect and these are known as “exempt” solvents. Exempt solvents are excluded from VOC content calculations in the USA and Canada.

### **AkzoNobel Sign Finishes commitment to sustainable building practices**

AkzoNobel's commitment to Sustainability is clearly demonstrated by our first place ranking in the Dow Jones Sustainability Index Chemicals supersector in 2012.

AkzoNobel is proud to offer Low VOC products to building owners and operators. Low VOC products can be used to contribute to the overall goals and spirit of LEED, even if they cannot be used for LEED Indoor Environmental Quality credit.

**AkzoNobel tops global sustainability ranking**  
September 13, 2012

AkzoNobel has cemented its position as a global sustainability leader after being ranked in first place in the Chemicals supersector on the prestigious Dow Jones Sustainability World Indexes (DJSI)