



## Changes in LEED Guidelines Regarding Ice Melt

If you are a facilities manager, a snow industry professional or LEED property owner, this information will interest you.

**GUIDELINE CHANGES:** Effective November 1, 2016, LEED updated its ice melt guidelines and excluded many previously used ice melt substrates. The U.S. Green Building Council clearly states the compliance path is 95% calcium magnesium acetate (CMA). Documentation from the USGBC regarding these changes is enclosed.

**FALSE CLAIMS:** As you know the ice melt industry is unregulated. False claims abound, which include assertions about products containing CMA. For instance, spraying a CMA solution onto chloride does not constitute a CMA product nor is it LEED compliant. In fact, the only United States manufacturer of CMA deems the blend must contain at least 20% CMA to claim the product has CMA in it.

**EXCEEDING STANDARDS:** Natural Alternative® Ice Melt has been researching, developing and offering LEED compliant ice melt products to snow and ice professionals for nearly two decades. Our newest product contains 100% calcium magnesium acetate, is chloride-free and exceeds the U.S. Green Building Council LEED guidelines by 5%.

We invite you to review the enclosed information and familiarize yourself with the latest breakthrough in snow and ice management. Our team of ice melt professionals is ready to assist you with products, delivery and storage options to meet your winter, snow and ice storm needs. We will also help you with your LEED documentation for your Outdoor Maintenance Credit substantiation.

Best regards –

The Natural Alternative® Ice Melt Team



This article is a reprint from the FMLink website.  
<http://fmlink.com/articles/changes-in-leed-and-de-icers-your-de-icer-may-not-be-compliant/>



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*\* This article was requested by FMLink without FMLink's being compensated for it.*

## Changes in LEED and De-icers: Your De-icer May Not be Compliant

*Implications for facilities managers using de-icers*

by Michael Army, P.E., LEED EB, President — Looking ahead to the winter season, it is important that facilities managers pay attention to their de-icer purchasing choices, especially for buildings that are earning or maintaining certification under the LEED Operations + Management (O+M) rating systems. A recent LEED Interpretation has redefined the requirements for LEED-compliant de-icers.

### Updated LEED Interpretation for De-icers

LEED Interpretation 10146, which clarifies the requirements for deicing products that are compliant under Sustainable Sites credit 2: Building Exterior and Hardscape Management Plan, was substantially updated on January 1, 2015. LEED Interpretation 10146 now reads as follows:

*"Projects may use one of the following compliance paths to achieve the de-icer portion of the snow and ice removal requirements for the credit addressing: Building Exterior and Hardscape Management Plans."*

#### **De-Icer Compliance Path 1:**

Only use de-icers that contain 100% calcium magnesium acetate.

#### **De-Icer Compliance Path 2:**

1. Demonstrate that environmentally preferred de-icers were used at least 20% of the time during the performance period, measured by weight, volume or cost. **Environmentally preferred de-icers are defined as:**
  - a. **De-icers that contain less than 5% sodium chloride, calcium chloride, ammonia-based products and ferrocyanide products. [Update: While the January 1, 2015 contained magnesium chloride, potassium chloride and potassium acetate in this list, a July 1, 2015 Reference Guide Correction (ID#100002010) removed them from the list of environmentally preferred de-icers.]**



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2. Implement a de-icer quality assurance monitoring plan during the performance period to track ongoing de-icer use and record its effects for every snow event:
  - a. Monitoring could include: if de-icer was applied prior to snow events, if areas were shoveled prior to de-icer application, the amount of snow over the season, the temperature when de-icer was applied, the time for snow to melt, etc.
  - b. Include a plan to phase out all de-icers that are not environmentally preferred within 3 years.

The new requirements apply to all projects registered after January 1, 2015, under any version of the LEED O+M rating system, including recertifications. For projects that may be using SSc2 as an Innovation credit path in a Building Design + Construction application, these requirements also affect the required building exterior and hardscape management plan. The requirements are applicable internationally, as well as to projects in the United States.

#### What Does this Mean for You?

The de-icing product you used last year may not be compliant this year.

Any de-icer that contains more than 5% sodium chloride, calcium chloride, ammonia-based products and ferrocyanide products is not considered environmentally preferred. You will not qualify for this credit if it is used more than 80% of the time.

De-icers that contain less than 5%, in total, of these substances are considered environmentally preferred. However, if you use such a product, you must also track its use and its effects after every snowfall. This is a more onerous task than simply recording how much product you used each month. Additionally, you will have to plan to phase out your use of all non-preferred de-icers within three years.

Your alternative is to switch now to a product containing 100% calcium magnesium acetate (CMA).



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## How CMA Works

Rather than melting snow and ice, CMA prevents snow and ice from adhering to surfaces, allowing it to be cleared away more easily.

## Application

CMA is best applied before, or in the early stages of, a snow event. Since it does not run off, it has to be reapplied less frequently than some other de-icers. Because it is used differently than traditional de-icers, you may have to retrain your staff in the use of CMA.

## Impacts on Surroundings

CMA is biodegradable and will not burn the surrounding vegetation. It is also less corrosive than de-icers that contain chlorides, but can still damage asphalt and concrete.

## Cost

CMA comes with a much higher price tag than some other deicing products. For example, it costs about twice as much per pound as sodium chloride (rock salt).

## The Bottom Line

If LEED certification or recertification is on the agenda for your building, make sure you have thought through how you plan to meet the de-icer requirements.

# Natural Alternative® 100% CMA Ice Melt

with XT360® Bio-Based Activator for Faster Melting & Lower Freezing Temperatures

## Benefits

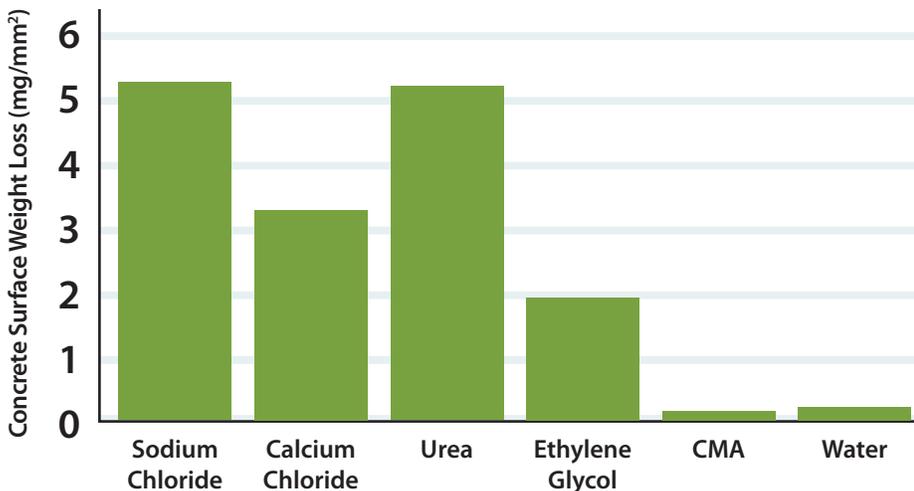
- Chloride-free—eliminates chloride corrosion of metals
- Less corrosive than tap water—easy on watersheds, lakes, rivers and streams
- Increases soil permeability—calcium and magnesium are soil amendments
- Highly visible colorant—aids applicator in low-visibility conditions
- No pitting or spalling—safe to use on properly installed concrete 30 days after installation\*\*



## LEED Compliant

Natural Alternative® 100% CMA Ice Melt exceeds the U.S. Green Building Council LEED credit guidelines for the Building Operations and Maintenance rating system, making it the safest ice melt for high-value structures. Whether you're a property manager, retail site, hospitality business, warehouse, distribution center, building engineer, construction company, DOT, LEED property, or a snow/ice professional, you've now discovered the safest chloride-free ice melt product.

### \*\*Spalling Effect of Deicers on Non-Air Entrained Structural Concrete



## About CMA

Snow and ice professionals have benefited from blended chloride-based products and the incremental improvements they have offered over rock salt. Now, Calcium Magnesium Acetate (CMA) provides a breakthrough in snow and ice management with chloride-free, low-corrosive and environmentally-friendly properties, melting ice and snow to 15°F.

Natural Alternative® 100% CMA Ice Melt is produced exclusively in the United States—never offshore. The patented Unipel® manufacturing technology and the integrity of the domestic-based ingredients meet consistent quality control standards. Our claims regarding performance, formulation and benefits are truthful. In a non-regulated industry, where anyone can say almost anything, we stake our brand and reputation on being transparent about our product.

## How CMA Works

CMA keeps the snow lighter and drier, thus improving traction and snow and ice removal. Do not expect CMA to create a brine like traditional chlorides.

## Directions

For best results, apply before or at the beginning of a storm to prevent snow/ice bonding. Allow time for product to penetrate and loosen the snow/ice before removal. Re-apply when new accumulation shows first tendency to bond.

Application rates vary according to climate and maintenance practices. First applications should be heavier and become lighter as a storm continues.

**COMMERCIAL APPLICATORS: Apply 5 – 15 pounds per 1,000 square feet.**

**HIGHWAYS: Apply 300 – 400 pounds per lane mile.**

NOTE: The bulk density of Natural Alternative® 100% CMA Ice Melt is about 40 pounds/cubic foot compared to 70 pounds/cubic foot for rock salt. Since CMA is lighter, applications based on weight will appear to have 75% more pellets on the road surface compared to an equivalent application of salt.

Apply in accordance with label recommendations. When used as directed, this product will not harm plants, lawns or paved surfaces. If swallowed, consult a physician. If product gets in eyes, flush with water. If redness or irritation is severe or persists, consult a physician. Wash hands after application.



Complies with Leadership in Energy & Environmental Design (LEED) Guidelines on the Green Building Rating System

Meets Federal Aviation Administration (FAA), Society of Automotive Engineers (SAE) and Aerospace Material Specification (AMS) 1435 approval for deicing and anti-icing materials

Listed on the Pacific Northwest Snow Fighters (PNS) Qualified Product List

**SIMA**  
Snow & Ice Management Association Member



Our team of professionals is ready to speak with and assist you in developing an environmentally-sensitive site plan for snow and ice management. Contact us today to learn more about Natural Alternative® 100% CMA Ice Melt.