

# DESIGN-BUILD Solutions

ESI specializes in food processing and distribution center design and construction.

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## PROJECT FEATURE



## Gathering All Parties Concerned

**W**hen it comes to launching a new product, installing a new production line or building a new facility, it's imperative that all parties concerned be involved and on the same page.

Such is the case for United Natural Foods, Inc. (UNFI), a Providence, R.I.-based independent national distributor of natural, organic and specialty foods.

UNFI's story begins in the 1970s when consumer interest in natural foods began to blossom. Small regional distributors were established to meet the needs of this growing market. For example, Michael Funk started Mountain People's Warehouse in 1976 out of the back of his Volkswagen van before there

was even a legal definition of what organic meant. Meanwhile, Norman Cloutier opened Cornucopia Natural Foods, a small retail store that later converted into a warehouse for wholesale distribution. The company grew and acquired several other distributors, including Rainbow Natural Foods, a small cooperative. In 1996, Cornucopia and Mountain People's Warehouse merged, forming UNFI.

In the years following the merger, other regional distributors joined UNFI, including Stow Mills, natural foods store Good Life in Vermont and Blooming Prairie, a Midwest distributor of organic and natural products.

Today, UNFI distributes dry, refrigerated and frozen groceries as well as perishables and fresh produce, among other non-food items,

from 18 centers throughout the United States and Canada. It also provides marketing, promotions, merchandising, category management and store support services for retailers and manufacturers.

"UNFI has exhibited substantial growth due to the ever-increasing organic market demand," says Tim Nguyen, regional vice president of ESI Group USA (ESI). "The current regional distribution centers operating by UNFI are at full capacity, transportation logistics are reaching boundary limits and reserves for new business opportunities are limited. In particular, the Midwest market has played an integral part of that growing market, which prompted UNFI to build a brand new distribution center to meet that demand." »

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- > **AAMP (MEAT PROCESSORS)**  
June 19-21, 2014  
Milwaukee, WI | Booth 116
- > **DISTRIBUTION SOLUTIONS CONFERENCE (IFDA)**  
October 21-23, 2014  
Indianapolis, IN | Booth 1020



# LEEDing the Way to a More Energy Efficient Building

**T**hese days, terms like sustainability, environmentally-friendly and energy efficient are more than just a fad—they're a way of doing business.

And the folks at ESI know better than anyone about environmental design for food facilities.

The environmental impacts of standard design, construction and operations of creating a LEED-certified facility are enormous. These buildings typically consume more than 30% of the total energy and more than 60% of the electricity in the United States. In fact, refrigerated buildings are some of the greatest users of energy, so to limit or reduce energy

use makes the most economic sense.

Furthermore, green design, construction and operations have social elements that can be leveraged to maximize sales and make a company more socially responsible.

However, use of sustainable materials is only a small part of sustainable design. The way ESI applies sustainable techniques is what makes them unique. ESI typically uses design standards, or "low hanging" fruit, to successfully qualify for the most LEED points. This is more economically friendly and reinforces the idea that, in general, good design is also "green."

For projects in the southwest, for exam-

ple, ESI utilizes concrete over asphalt because it will hold up longer and doesn't absorb heat like asphalt. Reducing the heat island positively impacts microclimates as well as human and wildlife habitats.

Another way to implement sustainable techniques is to utilize low flow/water fixtures in restrooms. The operational impact is minimal, but the overall savings is very impactful, as thousands of gallons of water can be saved.

Currently LEED is not tailored specifically

for refrigerated cold storage facilities. In order to even qualify, some pre-requisites need to be modified for refrigerated facilities. For example, installing mechanically or naturally ventilated air that flows into the entire build-



ing is extremely inefficient for a freezer or cooler area, but is acceptable in an office or classroom area.

Most importantly, what do companies need to do to become LEED certified?

It's in any owners' best interest to educate themselves in green building practices and design. Another important step is to commission a firm, like ESI, with experience in the certification process. In addition, the owner should be willing to modify the way things have typically been done and commit to the change. A refrigerated facility can be built to LEED standards, but it must also be operated like a LEED building.

However you decide to do business, ESI can "LEED" your way into an energy-efficient future. ///

— *Authored by Tim Gibbons, Vice President of ESI Design Services.*

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As a result of the company's continuous growth, UNFI turned to ESI to construct a 450,000-square-foot facility in Sturtevant, Wis. The project began in January 2013 and will be fully operational in April 2014. The facility is mostly constructed of insulated metal panels, which provide an integral system consisting of vapor barrier metal skin and foam-in-place urethane insulation.

"This material is efficient, affordable and flexible for maintaining the required interior

refrigerated temperatures in a versatile climate such as Wisconsin," says Nguyen.

In addition, the cascade refrigeration system utilizes ammonia and CO<sub>2</sub> as refrigerants, which has proven to be the most efficient system for UNFI. Also, the facility is pursuing Gold LEED certification with the U.S. Green Building Council. Additional projects are in progress in Montgomery, N.Y., Gilroy, Calif., and Prescott, Wis.

"UNFI's growth pattern requires a partnership from all suppliers, vendors and consultants

that are willing to be committed in a successful long-term relationship," says Nguyen. "This requires firms such as ESI to make early investments to establish long-term benefits. ESI is not a contractor that is looking strictly from a perspective of a project-to-project basis; there are long-term benefits in providing planning, ongoing design, value engineering and consultation services, which enable a better quality facility that UNFI wants for all their facilities." ///

— *Authored by Tim Nguyen, Regional Vice President of ESI Group USA*