

- **Programming Verification**

Our commissioning staff will work to verify that building control setpoints are programmed correctly and are operating in accordance with the system design intent.

- **Testing and Balancing**

We work effectively with HVAC testing and balancing contractors in order to maximize the performance of the HVAC system.

- **Power Quality Analysis**

Coordination with an independent electrical testing company is essential to ensure power system performance parameters are met as well as safety hazards are avoided. We can work with a client's vendor to achieve this or provide this service to the client.

- **Existing Buildings**

We understand that the operation of a grocery store chain depends not only on the successful completion of new projects, but also on the performance of existing stores. We can provide analysis of an existing building's energy performance and propose solutions to optimize their operation.

Construction Administration

Our company understands that the consulting engineer's job is not complete when the design is finished, but rather, when the project is fully constructed. We strive to offer our clients construction administration services in order to ensure a successful store completion.

- **Office Support**

We review contractor shop drawing and answer field inquiries and questions in a timely fashion in order to accommodate schedules for the construction process.

- **Field Observation**

Routine field observation by the engineer helps to prevent small issues from becoming large problems late in the job. Our experienced staff can identify and assist in resolving construction issues in a timely and effective manner.

- **Engineering Expertise**

We have found that the construction management team often needs guidance when handling installations of complex mechanical and electrical systems. Our knowledgeable engineers are capable of providing this guidance.

- **Adhering to Specifications**

Too often in today's construction industry, the details of the specifications are overlooked. Our field engineers can offer their expertise to construction management personnel to assist them in enforcing our clients' specifications.

Experience

McHenry & Associates' most important asset is the experience of its engineering staff. We have been providing mechanical, electrical, plumbing and refrigeration design to clients of differing markets, both private and public, for 49 years. Over the years, we have had the opportunity to accommodate many grocery store clients. Some of these clients are listed below:

- Giant Eagle
- Dave's Markets
- Wild Oats Marketplace
- Save-a-lot
- Fresh Market
- Giant Foods
- SuperFresh
- Waldbaums
- Henry's Markets

New Opportunity

We have sent you this brochure in hope that your company may be interested in the services McHenry & Associates can offer to a grocer who is looking to get the most from their new or existing facilities. We can tailor services to your specific needs and work to offer you high value at a competitive cost. We are confident that our team of experienced engineers can offer guidance that will benefit your company in many ways. Please do not hesitate to contact our office. Any lead member of our grocery store team will be happy to answer questions and give more details on our company's capabilities and qualifications. Thank you for taking the time to learn more about us.

Please visit our website for additional information at www.McHenryAssociates.com or contact us at (216) 292-4696

Qualifications

- Registered in 48 states, Washington, D.C. and Puerto Rico
- LEED Accredited Professionals
- ASHRAE member
- IESNA member with LC certified staff
- IEEE
- ASPE member



m&a

McHenry & Associates, Inc.
Consulting Engineers
25001 Emery Road, Suite 200
Warrensburg Heights, OH 44128

McHenry and Associates, Inc.

CONSULTING ENGINEERS

Comprehensive Mechanical and Electrical Systems Design for the Grocery Store Market



"Providing Engineering Solutions for 49 Years"

What McHenry & Associates Offer?

For 49 years, our company has offered clients of differing markets many services. We have specialized in the grocery store market and can provide those clients the following:

- HVAC, Electrical, Plumbing and Refrigeration systems design for ground up and renovation grocery store projects
- Energy Analysis and LEED Certification
- Systems commissioning of new projects and recommissioning of existing stores
- Construction administration services from shop drawing review to field observation

Comprehensive Design Approach

McHenry & Associates is able to provide our clients with a multi-disciplined design approach for their projects. Such an approach offers our clients the following advantages:

- **Coordination of Building Systems**
Our engineers work together in one office to provide our clients with a set of construction documents that integrates the many systems present in a grocery store. This close coordination can be difficult to achieve when many consultants are used on a single project. We work with many architectural firms to integrate these systems into the overall building system.
- **Continuity of Personnel**
At McHenry & Associates, the engineers who interact directly with our clients are the same engineers who design and oversee completion of our clients' projects. We strive to maintain the same design team for multiple projects with a single client.
- **Single Point of Contact**
During design and construction, all questions and concerns regarding systems design, installation and operation can be directed to a single consultant. Our knowledgeable staff consistently supports our clients' needs.



We have experience designing the following types of systems as well as many others for the grocery store market:

- Heating, ventilation and air conditioning
- Dehumidification Systems
- Hood exhaust and Make-up Air system
- Refrigeration system design, including Second Nature glycol systems
- Plumbing domestic water supply, sanitary and grease waste
- Water filtration & purification
- Vacuum drainage for condensate disposal
- Fire Protection performance specifications
- Power distribution
- Artificial and natural lighting
- Centralized and distributed refrigeration
- Energy management controls for HVAC, lighting and refrigeration
- Fire Alarm
- Security
- Closed circuit television surveillance
- Loss prevention
- Public address
- Power monitoring
- Refrigerant leak detection
- Data and communication
- Emergency power
- Power quality control



Systems Design Overview

Our engineers tailor their design specifically for the grocery store market:

- Heating, ventilation & air conditioning design driven to achieve customer comfort and effective product presentation
- Innovative power distribution solutions to promote flexibility while limiting construction costs
- Lighting applications designed to highlight products effectively and minimize energy usage and maintenance costs
- Comprehensive refrigeration design based on coordination of controls and equipment to accomplish product preservation at minimum energy usage
- Plumbing supply & drainage design tailored to meet departmental needs
- Low voltage system coordination which works to benefit the many players involved in the operational aspects of the store
- Energy recovery and control system design to maximize the overall building performance



Energy Management Strategies

As a consulting engineer, McHenry & Associates not only provides a final design that meets all applicable energy codes, but also helps the client to realize the advantages of exceeding the minimum energy standards set by code. We accomplish this with the following strategies:

- **LEED Certification**
We employ LEED certified engineers to guide our clients in accomplishing the USGBC's LEED certification for both new and existing buildings.
- **EPA Act Tax Credits**
Our engineers can tailor their design to meet the requirements of EPA Act which can save our clients up to 40% a year in energy costs through a government tax incentive.
- **Innovative Strategies**
We can explore and employ strategies such as refrigeration floating head control, heat reclaim and recovery, daylight harvesting, energy efficient equipment application and water usage reduction.
- **Technology Analysis**
McHenry & Associates works with vendors to analyze new technologies based on projected payback.
- **Energy Modeling**
Through computerized modeling, we can predict energy consumption during design in order to budget future operational costs and modify the design accordingly.

Project Commissioning

We believe that no project is complete until it has been properly commissioned. Commissioning provides documentation to the owner that the systems have been installed and adjusted as designed to provide maximum return on investment for each project.

- **Program Review**
We can provide a review of building system approaches to optimize system efficiencies while providing the desired building environment for the project budget. Early documentation in the construction process to clearly define the desired result is critical to a successful project.