Case Study – August 2012

Expansion and Relocation Brings Green Energy Opportunities to Independent ShopRite in Brodheadsville, Pennsylvania

Four generations after the Kinsley family opened its first grocery store in the 1950s, the small community of Brodheadsville will be home to one of the greenest, most energy efficient independent supermarkets in the United States.

With construction of their new store – the nation’s largest ShopRite – the Kinsleys nearly doubled their square footage and created a virtual blank slate for designing a more energy efficient, sustainable business. They hoped to achieve several objectives with the new store: to expand their footprint and merchandising capabilities, to provide a space for community gatherings, and to have more energy efficient, sustainable refrigeration and power systems.

The Kinsleys tapped Hillphoenix and Pennsylvania-based AMF Refrigerated Products Co. to design a turnkey store development plan that included the use of natural
refrigerants, state-of-the-art walk-ins, energy efficient power systems, Coolgenix meat and seafood display cases, and Hillphoenix display and specialty cases.

Only one manufacturer in the world can provide totally integrated mechanical, power, merchandising and sustainability solutions. From design to implementation, Hillphoenix multidisciplinary teams collaborate across divisions to create and implement efficient turnkey solutions – whether the customer is a nationwide chain or an independent owner/operator. The Kinsleys tapped the resources of every Hillphoenix division for their new store: Display Cases, Barker Specialty, Refrigeration Systems, Power Systems and Walk-Ins.

A more sustainable store from systems to merchandising

Presented with the opportunity to design a brand new store from the ground up, Chris Kinsley Sr., vice president and general manager for ShopRite Brodheadsville, made energy efficiency and sustainability a top priority.

“Energy efficiency and maintenance were top considerations. As for the green technologies you’ll find in our store, that’s just the right thing to do,” said Kinsley.

The Brodheadsville ShopRite store was built to meet EPA GreenChill Gold standards for sustainable refrigeration. GreenChill Gold Award certification requires that a store use only non-ozone-depleting refrigerants. It must also achieve an average HFC refrigerant charge of no more than 1.25 pounds of refrigerant per 1,000 BTU per hour.
total evaporator cooling load and a storewide annual refrigerant emissions rate of no more than 15 percent.

Hillphoenix offers an array of natural and traditional refrigerant-based systems including glycol, CO₂ and traditional hydrofluorocarbons. ShopRite Brodheadsville chose a Hillphoenix Second Nature® MTLT2 system that combines a medium temperature secondary coolant system using glycol and a low temp CO₂ secondary system.

**Coolgenix™ cases protect seafood**

ShopRite’s seafood department features Hillphoenix Coolgenix display cases, which offer significant advantages in performance, energy savings, and labor savings. By eliminating the use of convection heat transfer, which can have an adverse effect on unpackaged meat and seafood, Coolgenix enhances product integrity and safety. Evaporation caused by air flow in convection cases can cause product to dry out. Coolgenix also minimizes condensation and frost build-up within the case.

Coolgenix cases are also perfectly suited for storage as well as display. Display cases can be left stocked overnight, eliminating the need for daily loading and unloading of cases. The Coolgenix secondary cooling system also utilizes less refrigerant charge, shorter pipeline runs, and lower pressure systems.

**Integrated power systems save time and money**

On the power systems side, ShopRite Brodheadsville will benefit from quantifiable savings in the areas of cost, time and space by choosing an integrated power system configuration. Hillphoenix pioneered the integrated power distribution systems category by providing cost effective solutions that allow customers like ShopRite to reduce construction costs, reduce construction time, and alleviate the risks associated with electrical construction.

On average, Hillphoenix customers realize a 10-15 percent reduction in the cost of the electrical distribution installation, 5-10 percent reduction in the critical path schedule and 20 percent reduction in the space necessary to install the electrical distribution equipment.

Furthering the energy efficiency and merchandising capabilities of their Hillphoenix cases, ShopRite selected energy saving Hillphoenix Clearvoyant™ LED lights and Hillphoenix Climate Keeper™ environmental management.
The custom light rod design of Clearvoyant provides consistent and complete light distribution throughout the display fixture, eliminating dark spots and delivering 15 percent more lumens per watt than competitive systems. Climate Keeper enhances HVAC efficiency by creating neutral airflow within the store, ensuring that little or no unwanted air enters the store through loading docks and entrances, and it prevents treated air leaving the store.

Walk-ins

Many retailers have come to expect the same-old, same-old when it comes to walk-ins. Hillphoenix walk-ins are redefining customer expectations with features including improved hinges, handles, seamless jam guards and LED lighting. Hillphoenix proprietary hinges lift the door by \( \frac{3}{4} \)", putting less stress on the door components and creating a gravitational force that prevents doors from being left open. Improved door sweeps prevent damage to exterior floors, and ergonomically enhanced door handles make it easier for associates to get in and out. Seamless jam guards feature hidden fasteners that eliminate friction and potential snags.

Cozy, community space

Rounding out their vision for a new store, the Kinsley family designed a 125-seat loft area, as well as a meeting space for community non-profit organizations – many of which Kinsley family members personally support. A stone fireplace is the centerpiece of the space, which overlooks the showroom floor and includes free wireless Internet access, two televisions and a sofa.

“The Kinsley family is very community-oriented,” said Faith McFarland, AMF Refrigerated Products, Co. “This store is the culmination of many years of community service and entrepreneurial success. They have built something really special, and I think their customers will really appreciate shopping here.”
About Hill PHOENIX

Hill PHOENIX Inc., a Dover Company, is based in Conyers, Ga. The company designs and manufactures commercial refrigerated display cases and specialty products, refrigeration systems, integrated power distribution systems and walk-in coolers and freezers. Visit www.hillphoenix.com or call 800-283-1109 for more information.

About ShopRite

ShopRite is a retailer-owned cooperative that is part of Keasbey, N.J.-based Wakefern Food Corp. The Brodheadsville store will be operated by Kinsley’s Market of Tannersville, Inc.