Rooftop HVAC In Supermarket Setting

Want a cost effective, efficient, rooftop designed for Supermarkets...

Energy Wise
Consumers throughout the world will be stopping at their local supermarket today to purchase a variety of items on their grocery list. Little do they know just how much it costs to keep their rocky road ice cream at the ideal storage temperature. Between the walkway of canned goods, refrigeration coolers/freezers, and an island of fresh produce is the sizeable electricity bill that represents the most significant cost to the supermarket industry. Where the trend is to build massive super-stores to meet the supply and demand of today’s consumer, even a slight savings from the HVAC system could mean a huge improvement in energy consumption.

Supermarkets are a unique class of commercial building. They integrate heating, cooling, ventilation and refrigeration. For these reasons, Trane has developed the IntelliPak supermarket unit. The exceptional design of IntelliPak heat and cool supermarkets around the world. As a world class leader, Trane has partnered with major supermarket chains to provide a comfortable shopping environment that helps keep customers coming back to the store year after year.

Trane’s IntelliPak® Supermarket Unit

Trane’s IntelliPak rooftop contains tangible advancements for the supermarket business to benefit the owner and the consumer. As a leader in commercial rooftops, Trane has perfected the design and production of the IntelliPak.

Timely delivery of equipment and associated curbs will help to minimize the overall construction time for new supermarkets. Store retrofits will benefit from transition curb options available to fit almost any roof curb.

Factory commissioning of the HVAC equipment helps ensure the highest level of quality and customer satisfaction. Commissioning also assures that the design goal for proper IAQ, moisture management and energy efficiencies are met.

...Ask Trane
HVAC Value for Supermarkets

Pure and Simple ...Energy Savings

ASHRAE 90.1 — Meeting the legislated EER requirements can be challenging, but Trane not only meets, but in most cases exceeds, these requirements. Trane is unique when it comes to complete building control. By combining our high efficiency rooftops with a Trane Summit Integrated Comfort System (ICS) optimal equipment performance with lower energy consumption is possible.

Evaporative-Cooled Condensing Option — Evaporative cooling lowers condensing temperatures and compressor workload to reduce energy consumption, allowing the system to operate more efficiently. Evaporative condensing can save customers up to 40-percent in annual operating costs. The IntelliPak evaporative-cooled condenser is a combination of a cooling tower shell and tube condenser. Condenser coil sets are nested in a high density plastic housing. Refrigerant gas enters each coil set at the top where a three dimensional spray covers the entire coil surface. Upward moving air sweeps over the wetted surface of the coil. The evaporating effect of the water withdraws heat from the coils and the contained refrigerant gas reverts to a liquid and exits via gravity at the bottom of the coil.

IntelliPak is Designed for Supermarkets:

Hot Gas Reclaim Coils: Trane’s Large Commercial rooftops offer hot gas reclaim coils. Hot gas from the store’s display case refrigeration system is piped to the factory installed hot gas reclaim coil in the Trane unit. In this manner, when desired, the heat generated by the refrigeration system, which would normally be rejected to the outdoor ambient, can be more efficiently used as a source of heat for the store’s conditioned air. The hot gas reclaim coil can also be used as an effective means to reheat the store’s conditioned air for humidity control, minimizing the case defrost cycles.

Open Protocol: The optional Tracer LCI-I (LonTalk® Communication Interface for IntelliPak) enables the rooftop unit to communicate over a LonTalk network. Either space comfort controller functional profile (SCC) or discharge air controller profile (DAC) are available. These profiles are communicated via LonTalk FTT 10A free topology communications transceiver. LonTalk is an industry standard, open, secure, reliable, network communication protocol for controls, created by Echelon Corporation and adopted by the LonMark Interoperability Association. Interoperability allows for the best product of a given type rather than one vendor’s entire system.

IntelliPak Offers:
The IntelliPak rooftop has cooling capacities ranging from 20 to 130 tons. Each rooftop is equipped with a state of the art direct digital unit control module (UCM) as standard. Basic components of the UCM are the rooftop module (RTM), single or multiple compressor module (SCM, MCM) and the human interface (HI). This pre-configured, factory-installed and commissioned UCM is a highly-integrated product that provides accurate and reliable control and equipment protection.

Trane’s IntelliPak rooftop has partnered with major supermarket chains to provide a comfortable atmosphere at the lowest possible energy cost. Our “human interface” controls offers store managers or maintenance personnel the ability to communicate one-on-one with the IntelliPak.

...Trane has the answer in Supermarket HVAC design.