

**BAKER**

REFRIGERATION

Supermarket Temperature Control

Temperature control plays a critical role in improving energy efficiency and maintaining the proper functionality of your equipment.

SUPERMARKET AIR CONDITIONING

Supermarket air conditioning systems are designed to maintain a comfortable shopping environment for customers while also ensuring that perishable items are kept at the right temperatures.

Efficient air conditioning helps in reducing heat load, which is particularly important in sections with open refrigeration units. Proper air conditioning prevents the warm air from entering the cooling zones, therefore maintaining the integrity of refrigerated products.

Additionally an optimised air conditioning system can lead to significant energy savings, reducing the supermarket's carbon footprint and operational costs.

DRAFT MANAGEMENT

Drafts can significantly affect the temperature stability within a supermarket. Cold drafts in the winter or warm drafts in the summer can disrupt the internal climate, making it challenging to maintain consistent temperatures within refrigeration equipment.

Directing air conditioning outlets away from display cases reduces the impact of drafts by not displacing the air inside display cases.

Effective management of drafts, through the use of air curtains and strategically placed barriers, ensures that external temperatures do not interfere with the internal environment.

This not only helps to preserve the quality of perishable goods but also enhances customer comfort.

CASES WITH DOORS VS. NO DOORS

The choice between refrigeration cases with doors and those without doors also has an impact on temperature control. Cases with doors are more effective at maintaining consistent temperatures, as they minimize the loss of cold air, leading to better preservation of products and lower energy usage.

Cases without doors offer convenience and speed for shoppers. Supermarkets must balance these factors, often opting for hybrid solutions where high-turnover items are in open cases, while more sensitive products are kept behind doors.

This approach helps in maintaining food safety standards and reducing energy consumption.

STOCKING PRACTICES

Overstocking refrigeration units can obstruct air circulation, leading to uneven cooling and potential spoilage of products and understocking can cause energy inefficiencies as cooling systems work to maintain the set temperatures in partially empty spaces.

Proper stocking techniques, ensuring even distribution and avoiding overfilling help maintain the optimal temperature throughout the display cases.

Making sure you bring your products down to temperature (in a cool room) before adding to your cases will also help with maintaining temperature control.

This not only preserves the quality and safety of the food but also improves the energy efficiency of refrigeration systems.