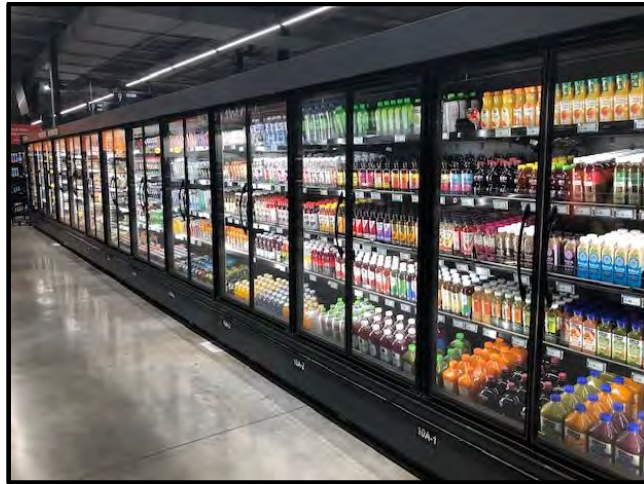


Close the Case (CTC) is a solution of adding a door retrofit to existing open cases

for retailers looking to reduce energy use, decrease shrink and encourage an increased consumer shop time.

Hillphoenix
a **DOVER** company

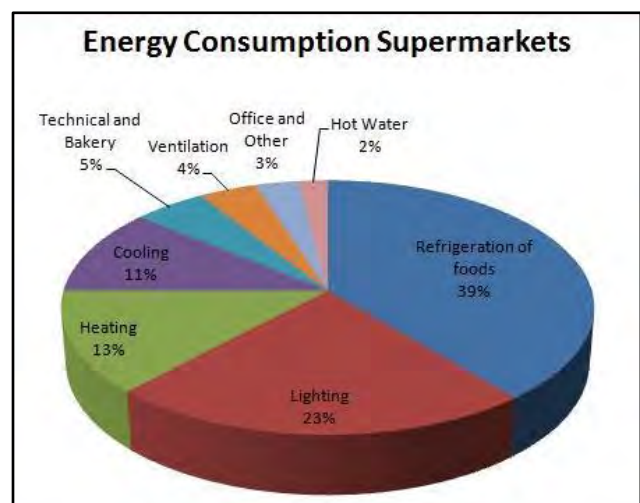
Indirectly, addressing these goals decreases energy-related costs, increases product shelf life, and improves customer shopping comfort. CTC can help achieve these goals & The AMS Group can be your partner to implement the solution.



ENERGY COST, PRODUCT SHELF LIFE & SHOPPER COMFORT

Energy Cost Increase

Studies have shown over 39% of supermarket energy is consumed by refrigeration, 23% by lighting, and 13% by heating. Current inflation has only increased this cost burden. CTC decreases BTU loads and translates into decreased refrigerated case costs. Adding glass doors keeps the cold air inside the cases and out of the aisles, adding warmth without requiring as much heat to maintain a pleasant ambient temperature within the store.



Open Case vs. Retrofitted Door Case Performance				
Case Configuration		O5M8 NRG without Doors	O5M8 NRG with Doors	O5M8 NRG with Doors
		Angled Shelves with Mirror	Same Evaporator Temp and Defrosts	Higher Evaporator Temp and Lower Defrosts per Day
Performance Factors	Average Product Temperature	33.5	30.4	36.6
	Maximum Product Temperature	39.3	32.8	38.3
	Evaporator Temperature	23.3	23	30.9
	BTUH/ft	1576	330	315(80% lower)
	kWh(per day)	33.3	9.7	9.6(71% lower)
	\$/year @ \$0.12/kWh	\$1459/yr.	\$425/yr.	\$420/yr.
	Def/Day	6	6	2

Shopper Comfort

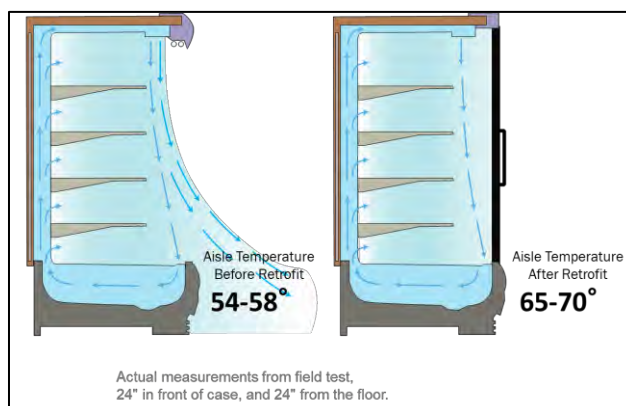
Oftentimes, shoppers quickly navigate through refrigerated aisles because of the cooler temperatures. Cold air falling and spilling over into the aisles can cause aisle temperatures to fall to 54-58 degrees F. Cases that have glass doors see aisle temperatures rise to 65-70 degrees F, enhancing the shopping experience and increasing customer dwell times.



Before CTC Installation

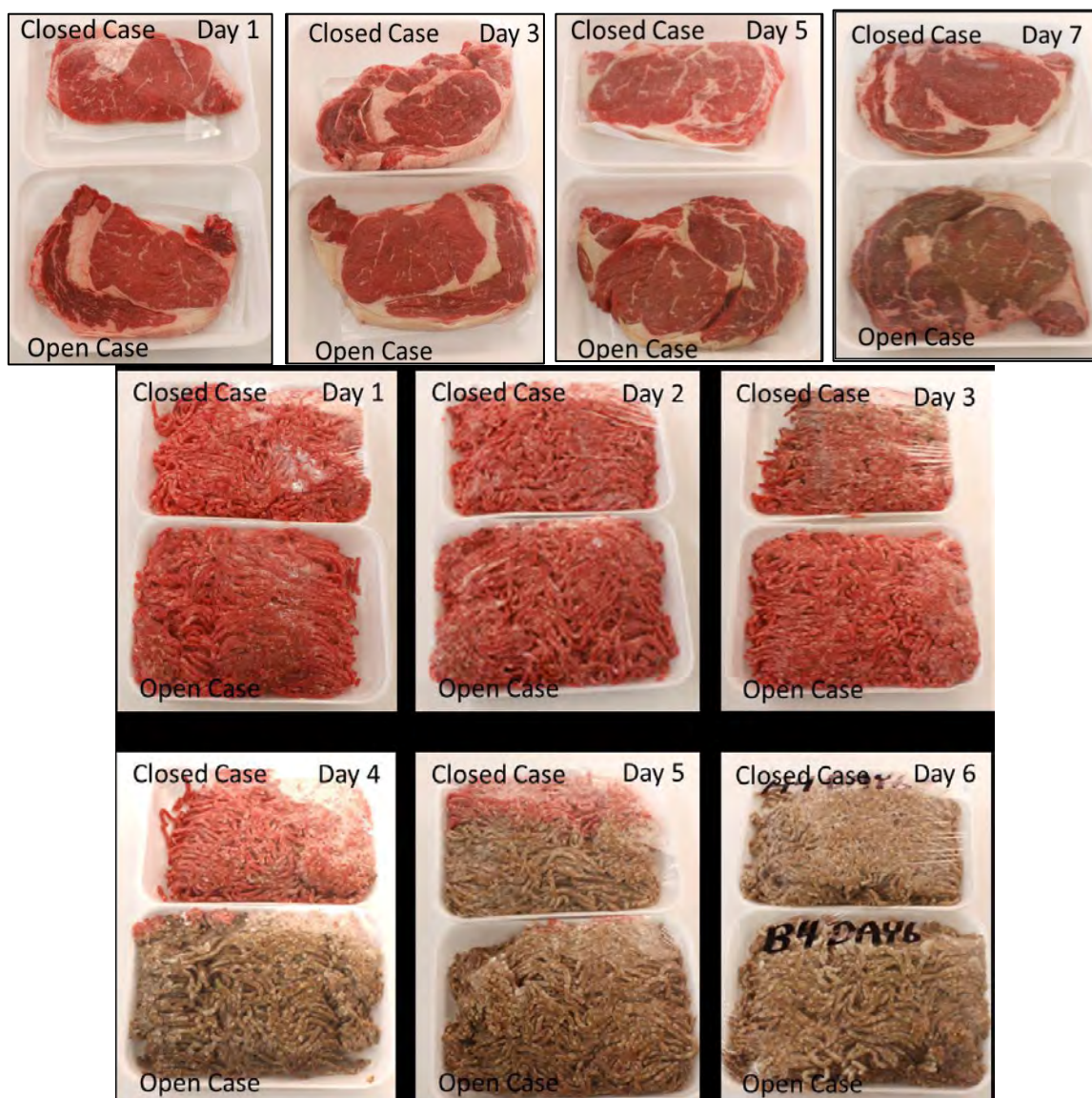


After CTC Installation



Product Shelf Life

The open multi-deck merchandiser is typically used to display fresh meat. Meat is one of the supermarket's highest revenue departments but has the highest shrink rate. Typically, supermarket retailers experience a shelf-life of about four days for steak and two days for ground beef. After these times, the meat has shifted in color from bright red to dark red or brown, and shoppers feel it is no longer fresh. Myoglobin is the protein in the meat that is responsible for this bright red color. While many factors can affect color change (packaging, vitamin E, etc.), temperature is one of the largest contributors to color shift in fresh red meat. In open cases, the temperature can vary based on product placement within the case. Glass doors create a level and more consistent temperature for all products within the case. Tighter temperature control extends product life & improves food safety.



THE AMS GROUP

How AMS can partner with you:

- Help determine and provide customizable turnkey solutions
- Single point of contact communication: leave all the calls and emails to us
 - Survey, manage multiple vendors, schedule coordination, QC (include?), documentation of completion
- Single site needs or manages large multi-site programs
- Refrigeration abilities/ teams
- Certified contractors used



Takeaways

- Lower refrigeration load by 80% and total power by 71%
- Heat load decrease -> Decrease defrost frequency
- Reduce aisle temperatures by 10-12 degrees
- Improve product shelf life by 4-5 days
- The AMS Group is uniquely equipped to provide a turnkey solution and can assist no matter where you are in the process. The AMS Group is your industry partner from future planning to immediate needs.