Energy & Store Development Conference

E+SD 2013

FMI™

THE VOICE OF FOOD RETAIL

Energy & Store
Development Conference

E+SD 2013

Close The Case:
Results in 10 Easy Steps

Introduction

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Close The Case Video

Video Here

Close The Case

Results in 10 Easy Steps

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Issue:

Food retailers are combating the effects of rising energy costs and tightening margins.

Solution:

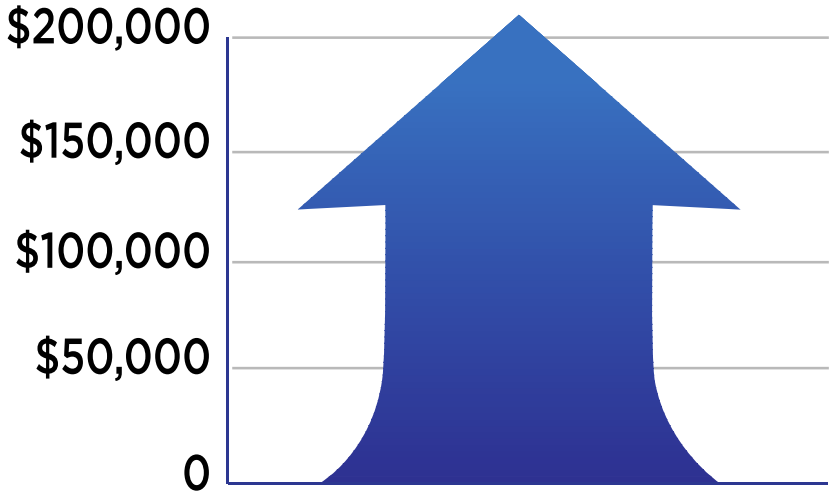
Close the Case solutions, installing doors on traditional open refrigeration cases, lower energy consumption and increase food retailer profitability.

Close The Case

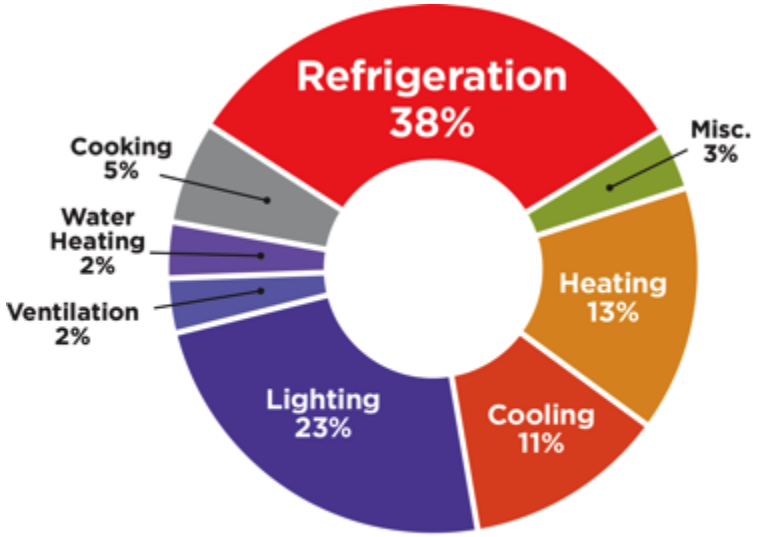
Results in 10 Easy Steps

Issue: Rising Energy Costs

Supermarket Energy Consumption



Annual Energy Costs
50,000 sq.ft. Facility
EPA Supermarkets: An Overview of Energy Use



Total Energy Comsumption by End Use
DOE Supermarket Energy Use Profile

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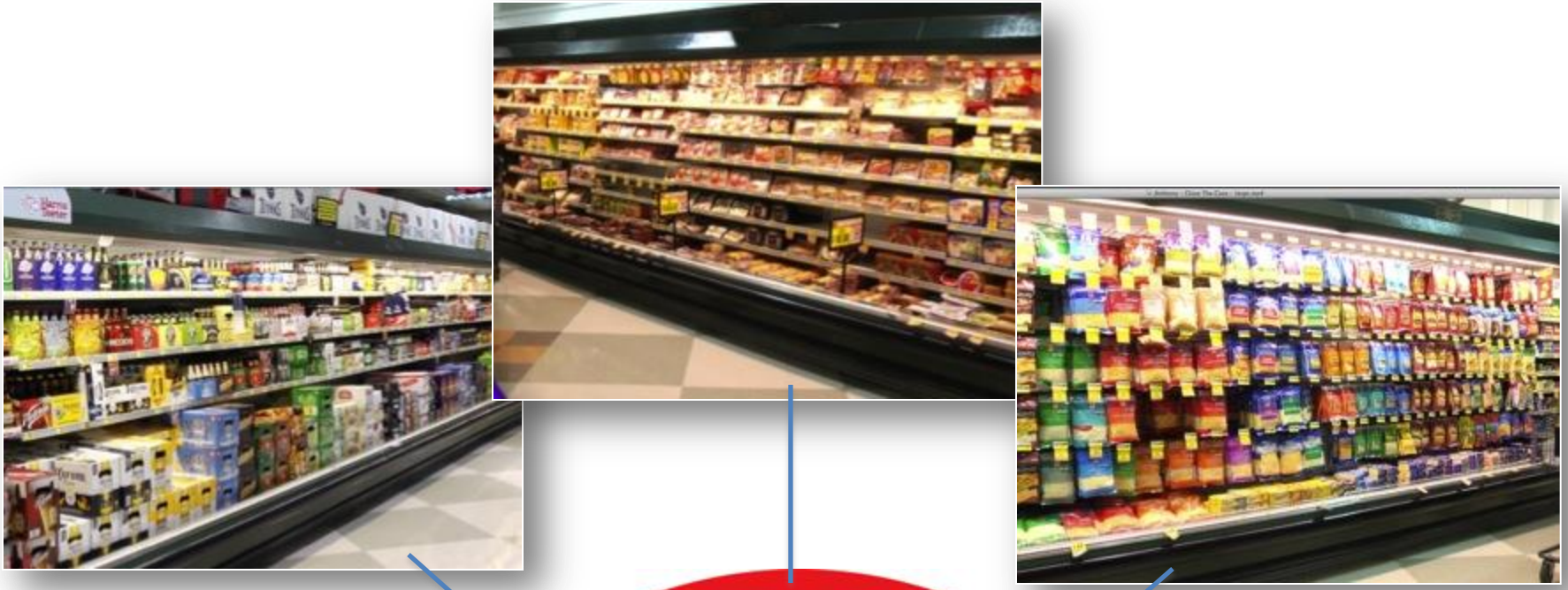
Issue: Major Refrigeration Consumption



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Additional Issues:

Product Shrink

Dirty, Worn Down Look

Shoppers Rushing Through Cold Aisles

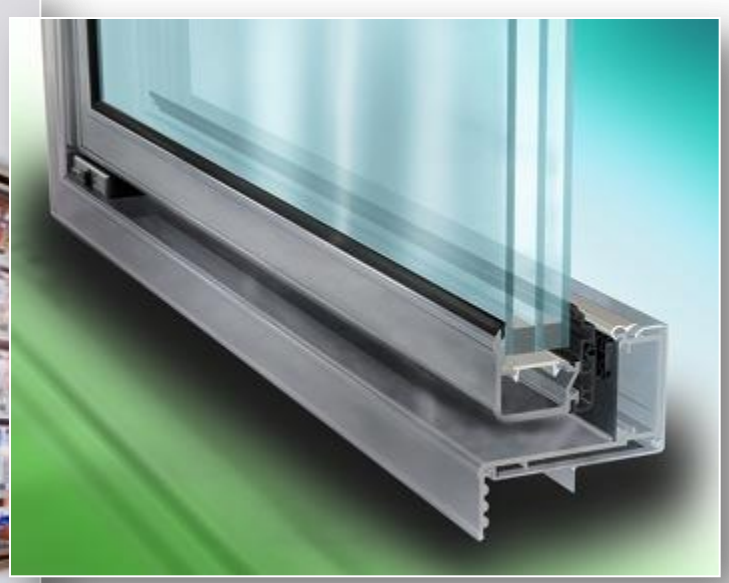
Solutions:

Close the Case, retrofitting existing open refrigerated or freezer cases with glass doors and installing LED lighting, lowers energy consumption and increases food retailer profitability.

Benefits:

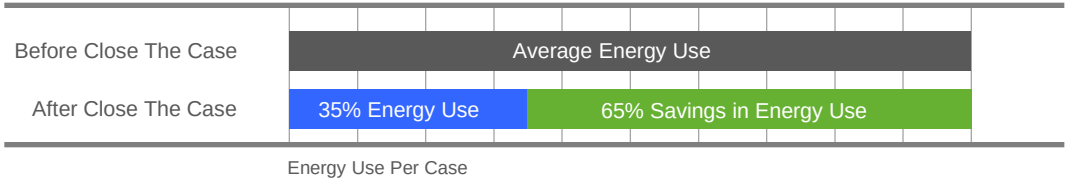
- Reduce Costs
- Increase profits
- Enhance Customer Satisfaction & Retention
- Improve Food Safety
- Lower Product Shrink

Energy Savings: Glass Swing Doors



Open Cases vs. Closed Cases

Individual stores can save up to 65% annually per case when cases are closed.

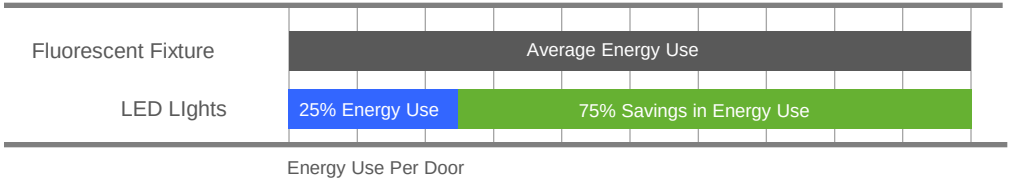


65 % Savings on Energy

Energy Savings: LED Lighting

Fluorescent vs. LED Lighting

LED lighting is 75% more efficient than fluorescent and lasts much longer



75 % Savings on Energy

Energy Savings: Island Case Slide Lids

50 % Savings on Energy

Energy Savings: Reduce Natural Gas Costs

*Supermarket Savings	40 – 50 therms/Lft./year
Average closed case project per store	100 Lft.
2012 average U.S. natural gas cost	$.81 / therm
Total Annual Natural Gas Savings	**$3,240 - $4,050**

**Conventional heating set point of 70° F - 72° F. ** U.S. Energy Information Administration.*

Natural gas utilities also offer rebate programs

Energy Savings: Open Case vs. Closed Case

Open Case vs. Closed Case Performance			
Case Configuration	O5M8 NRG without Doors	O5M8 NRG with Doors	O5M8 NRG with Doors
	Case Configuration-Angled shelves with mirror	Same Evaporator temp and defrosts	Higher Evaporator temp and lower defrosts per day
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

Energy Savings: Utility Rebates

Region	Provider	LED Lighting	+Dim Door
OH	AEP Ohio	$10-$12/ft case	$8-$10/ft case
NJ	NJ Clean Energy Program	$30-&65/ea	---
CA	SMUD	$55/door	+$35/door
CA	PG&E	---	----
WI	WI Focus On Energy	$25/door	+$10/door
NY	ComEd	$30/door	$30/door
NM	PNM	$30/door	----

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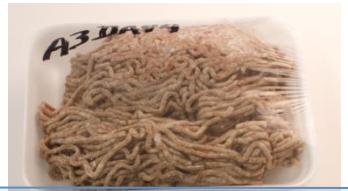
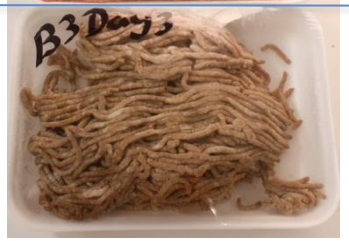
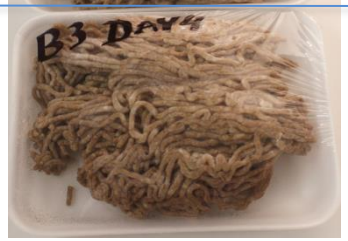
Increase Profits: Lower Product Shrink

Product Longevity Steak

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Closed Case							
Open Case							
	No color difference	No color difference	Slight color difference	Noticeable color difference	Definite color difference	Definite color difference	I wouldn't feed this to my mother-in-law

Increase Profits: Lower Product Shrink

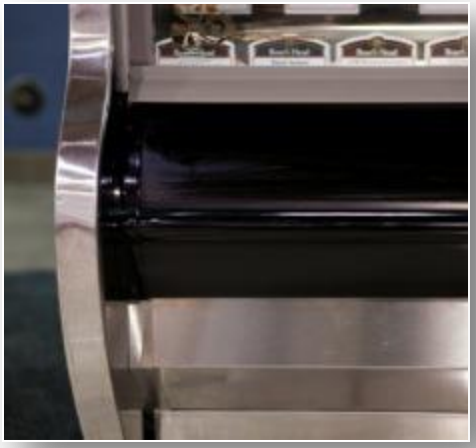
Product Longevity Ground Beef

	Day 1	Day 2	Day 3	Day 4	Day 5
Closed Case					
Open Case					
	No color difference	Noticeable color difference	Definite color difference	Definite color difference	I wouldn't feed this to my dog

Increase Profits: Compressor Load Reduction

Closing your open cases **also reduces compressor loads up to 80%,** which creates additional refrigeration capacity, leading to more merchandizing opportunities throughout the store.

Reduce Costs: Reskin



75% Savings vs. Replacing

Re-skin your existing cases and save up to 75% over replacement!

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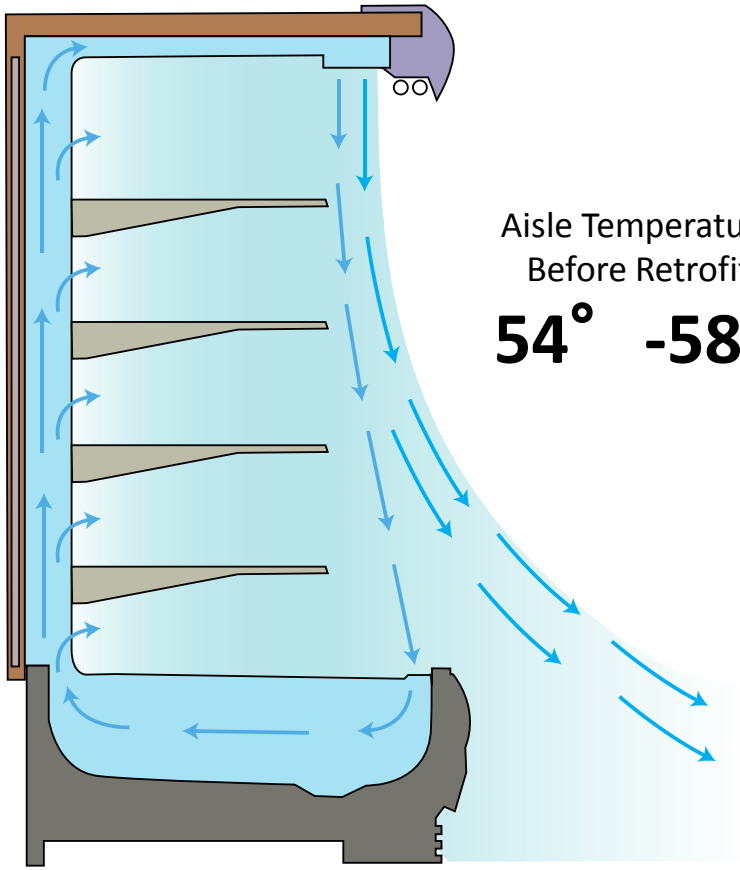
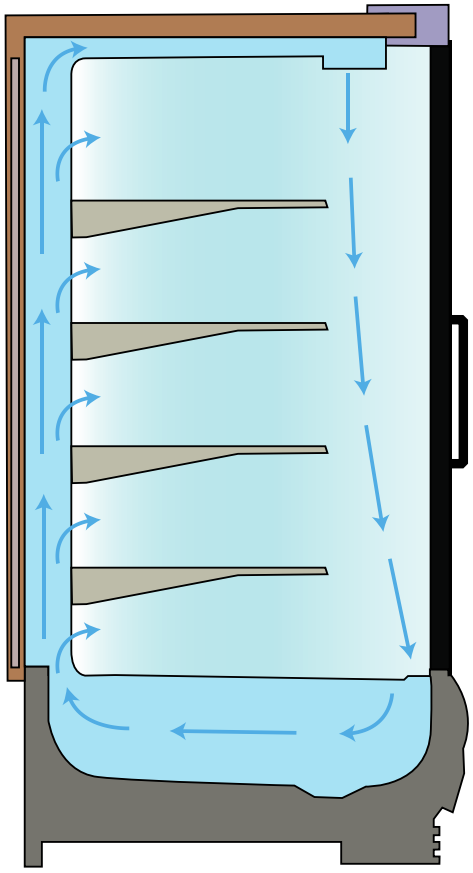
Customer Retention: Aisle Temperature



Aisle Temperature Before Retrofit

54° -58°



Aisle Temperature After Retrofit

65° -70°

Store average ambient temperature of 75°

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10 Step Process

	Step	Description
1	Scope Project	Scrub stores: equipment survey, case retrofit eligibility, system design/project phasing, project scheduling
2	Quote	Utility incentive review, project scope & pricing development, quote approval
3	Manufacture Parts	Internal project receipt, parts manufactured, Q/C, validate schedule
4	Assemble Kits and Shipping	Parts tested and validated, shipping and project staging
5	Pre-Construction Survey	Site meeting and safety review
6	On-Site Material Distribution	Final equipment store distribution
7	Removal	Removal and documentation of old product
8	Installation	New product installed
9	Finishing	Clean construction area, post installation review & sign-off
10	Utility Incentive Completion	Confirmation of work, costs, and calculation sent to utility

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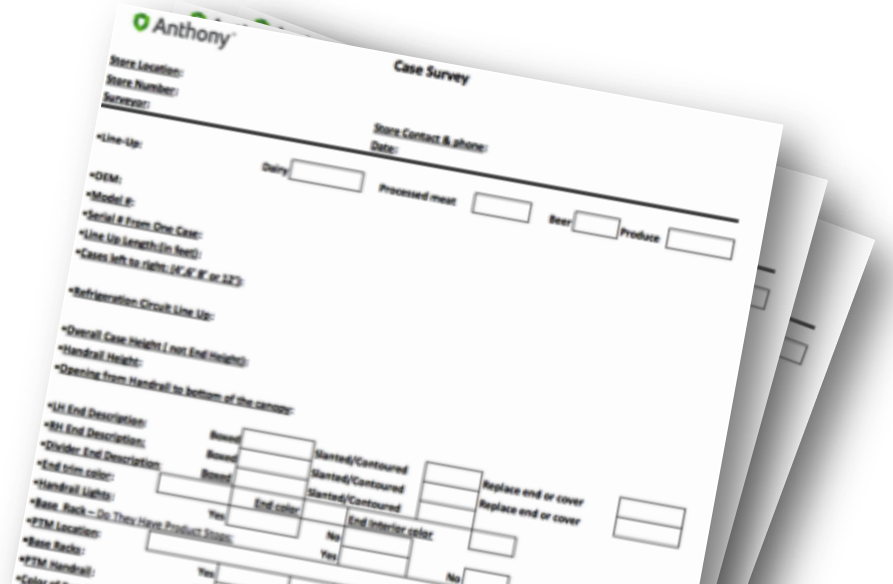
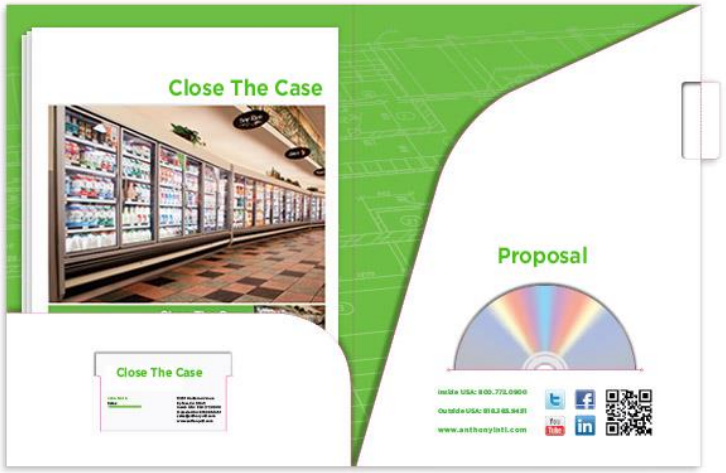
Step 1: Scope Project

- **Equipment Survey**
  - Compressor Systems
  - Refrigerated Cases
- **Case Retrofit Eligibility**
  - Aisle width
  - Type of product in case
  - Age of case
  - Store operations input
- **System Design / Project Phasing**
  - Phasing
  - Load reduction
  - Compressor Capacity
  - Condenser capacity
  - Oil separator sizing
  - Pipe sizing
  - Expansion valve sizing
  - ERP sizing
- **Project Scheduling**
  - Order Doors
  - Manufacturing time (8 weeks)
  - Ship dates
  - Expansion valve availability
  - Bidding & awarding project
  - Coordination of operations



Step 2: Quote

- Utility incentives
  - Preliminary Application
  - Pre-inspection
  - Letter of intent
- Detailed project scope and pricing
- Proposal approval

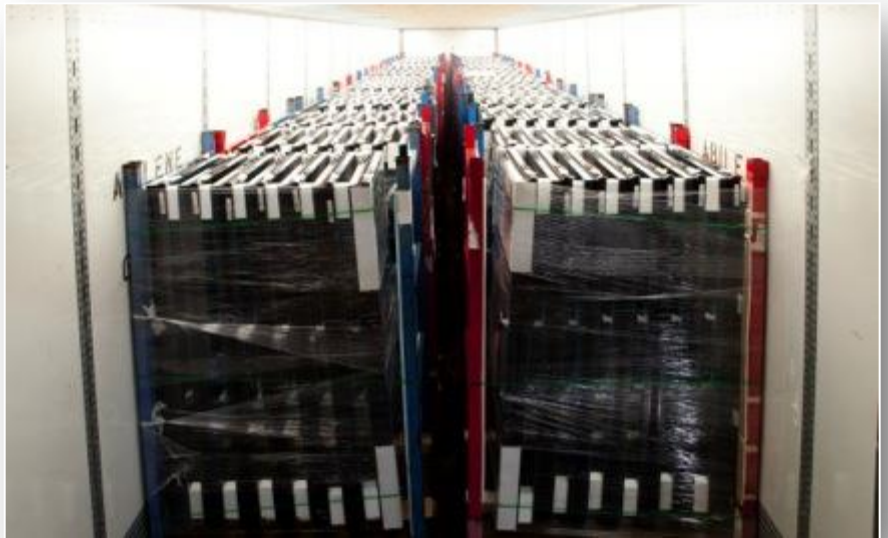


Step 3: Manufacture Parts

- Internal project receipt
- Parts manufacturing
- Quality control
- Shipping dates verified

Step 4: Assemble Kits & Shipping

- Parts pre-tested and assembled into kits
- Kits shipped and delivered to the store the same day the project is scheduled to start



Step 5: Pre-Construction Survey

- Site meeting of all trades and documentation review
- Verify on-site receipt of all parts and kits and staging
- Site pre-construction survey
- Secure work environment and review safety procedures
- Equipment modifications prior to installation

Step 6: On-site Material Distribution

- Distribute staged material to the identified store construction areas.

Step 7: Removal

- Remove the existing case parts and lighting
- Take photos throughout removal and installation process

Step 8: Installation

- Install new headers, handrails, nose rails, and frames
- Install light fixture wiring, frame wiring and doors.
- Depending on the linear feet required for the project, installation can last up to 4 nights.

Step 9: Finishing

- We will clean construction areas
- Recycle replaced material
- Have MOD inspect and sign the completion form
- Take photos of the completed project
- Perform a post installation walk through and have a final sign-off by retail personnel.

Step 10: Utility Incentive Completion

- Final calculations to utility
- Confirmation of costs
- Confirmation of work done
- Scheduling utility inspection
- Coordinating disbursement of incentive
- Post project customer follow up

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8 Guidelines to Evaluating Vendors

1.	To minimize headaches, use a vendor that can handle the project from start to finish
2.	Make sure the vendor can retrofit on all types of cases
3.	Require after-hours installation to minimize shopper inconvenience
4.	Choose a vendor that has a safety-first project process to ensure that the vendor's employees, store personnel and customers are safe during construction
5.	Check that your vendor offers and has a reputation of following through with after-the-sale support
6.	Use a vendor that manufactures their own products, to ensure quality control and timely distribution
7.	Make sure your vendor has experience with large multi-site projects.
8.	Check that your vendor factory-tests and pre-assembles products before shipping them to your site

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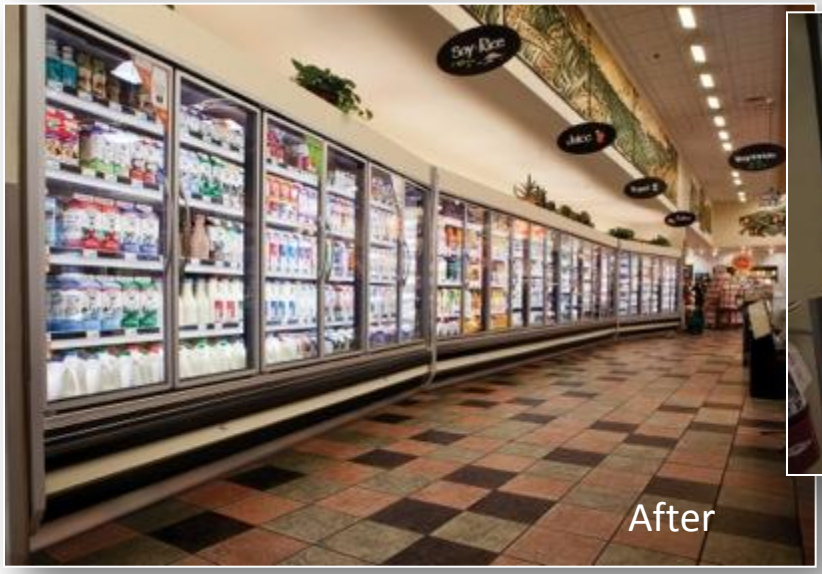
Harris Teeter



Whole Foods