



TAKING FRESH TO THE TOP

A CASE STUDY



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After spending over 30 years working for others in the grocery business, Jeff Maurer decided it was time to build his dream store, one that focused on 'fresh' but in an exciting and environmentally responsible way. He would call his store the Fresh Madison Market. After selecting his unique target market, he discovered a distinctly different approach to merchandising, one that would bring his 'fresh' concept to a higher level by dramatically cutting energy costs without compromising product quality or limiting sales potential. How he accomplished this, and, in so doing, realized the dream of a lifetime, is the subject of this case study.

LOCATION & DEMOGRAPHICS

Jeff selected a new, multi-use 12-story building in the middle of downtown Madison, Wisconsin, right in the heart of the bustling University of Wisconsin-Madison campus. The top 10 floors are apartments and the lower 2 floors are retail space, with Fresh Madison Market functioning as the anchor. The 18,000 square foot facility has 14,000 square feet of selling space, which represented a challenge in displaying the store's very wide assortment of fresh produce, deli, bakery, meat, seafood, and freshly prepared sushi. The store also carries traditional grocery, dairy, frozen foods, ice cream, general merchandise, health and beauty and an extensive selection of wine and beer. Fresh Madison Market opened its doors for business on January 14, 2010.

With 60,000 people studying or employed at the university and another 25,000 living in the immediate area, Jeff found a population hungry for something more nourishing than the fast-food fare that usually surrounds a college campus. These are people who regularly walk, bike or take public transportation to get to their destinations. Jeff's research uncovered the fact that this population prefers to eat fresh, nutritious food prepared daily and usually in the home, apartment or dorm room. This youthful, politically aware and environmentally conscious group also has a preference for organic foods, sourced locally and grown and shipped in ways that minimize their carbon footprint.

UNIQUE MEDIUM TEMP DISPLAY CASES



Zero Zone Crystal Merchandiser

“In order to maximize our space we thought that the Zero Zone doors would be most appropriate to bring us more availability of variety and more SKU count as well as terrific savings from an energy standpoint,” Jeff Maurer said in a recent interview. Jeff chose the new Crystal™ Merchandiser with 74 inch CoolView™ doors to display traditional dairy products, yogurt, packaged deli meats, beverages (including craft beer and premium juices), and bagged lettuce mixes. In regard to merchandising packaged salads behind doors, Jeff had some initial concerns: “We had not seen that before so we were pretty much experimenting as we went along, but my first impression when our merchandisers got done was, ‘Wow!’”

Jeff continued: “It made those packaged salads almost appear like it is jumping out of the door, the way it’s close to the glass, the way there’s more glass showing and less framework around the glass, as well as in the light hitting the product. I am really proud of the way our produce looks. We have three doors of salad dressings and dips for the produce department which, especially against the glass, and the light against the glass bottles, really makes it impactful. But then, in the next three doors we have Dole salads, which of course with that plastic bag and the light hitting that—it’s hard to walk by there and not notice it. We believe it has a material impact and positive effect on our sales.”

To merchandise the salads, Jeff used Cannon Magna-Bars, just like he would have done in an open case. “With the right length pegs you can really bring the product very close to the front of the doors,” he said, “especially when the product has either been faced or has been filled. It’s very hard not to see it as you walk by because of the way it merchandises, the way the light hits it.”

LED LIGHTING: PRODUCTS “JUMP OUT AT YOU”

All of Jeff’s door cases, for medium and low temp, use LED lighting, known for reducing heat generation in the case, long bulb life, low maintenance and attractive lighting qualities that contrast markedly with the hot spots, shadows and high maintenance costs associated with T8 lighting.

Jeff’s shoppers have even commented on the LED lighting and they tell him they can see the dairy cases from the front of the store. “Because the grocery aisles run perpendicular to the dairy doors, the customer can literally stand near the deli or near the checkouts and can see the rear of the store, which of course with the lights and the way it hits the product, is very attractive and it really catches their attention,” he said.

SHOPPERS' REACTIONS

When asked if he had any feedback from shoppers regarding his use of door cases versus open cases, Jeff mentioned: "They are very concerned about our climate and climate change. While it is different than what they may have been accustomed to," he continued, "there have been no negative comments from the customers and our sales have far exceeded expectations--not only in store sales, but in the departments where we do have the Zero Zone Crystal." Recognizing the benefit of communicating the magnitude of energy savings his Crystal cases represent, Jeff has posted decals on some of the case doors that drive the point home. The decals demonstrate his store's energy savings and make note of the positive environmental effects that could be achieved if all retailers switched from open cases to the more energy-efficient door cases. Some of the analogies presented on the decals include:

- These door cases save enough electricity to power 14 homes!
- These door cases reduce CO₂ emissions equivalent to taking 21 cars off of the road!
- If all stores nationwide replaced open cases with these door cases, there would be enough energy to power 1.3 million homes!
- We could save enough electricity to eliminate 9.4 coal fired power plants if all stores nationwide replaced open cases with these door cases!
- The reduction of CO₂ emissions would be the equivalent of taking TWO MILLION cars off of the road if all stores nationwide replaced open cases with door cases like these!
- The CO₂ produced by burning 55,000 railcars full of coal is the equivalent of CO₂ emissions saved if all stores nationwide replaced their open cases with these door cases!

Dana, a college student/shopper we interviewed at Fresh Madison Market, stated: "I think that, in open cases versus door cases, clearly door cases are much more energy efficient. If you have glass and it's clearly displayed to you and visible, why wouldn't you use a door case? Because, it saves energy and you have a lot less cold air escaping through. Door cases are vertical, so they can be a lot more space efficient. Open cases expend a lot more space horizontally across the floor. I think with door cases, they are more upright so you have a lot of things at eye level. And, you can stack a lot more things vertically, so you have a lot more room for more food. And, I think it's just an overall better space distribution."



FROZEN FOOD & ICE CREAM

Jeff Maurer uses lineups of Zero Zone RVZC30T2 low temp door cases (or 'T2') for frozen food and ice cream. With a 72 inch door nearly as tall as the Crystal Merchandiser's 74 inch CoolView door, these low temp T2 cases match up well with the medium temp cases. Both types of cases were outfitted with black interiors and black exteriors and incorporate 6 foot tall LED light bars that evenly illuminate the products in the cases. According to Jeff: "With frozen food it's been, again, the lighting that has been the biggest help to catch the attention of the customer as they are walking by, certainly to highlight those products and hopefully get them to buy more. The other part of it is the height and getting that extra shelf in there, again, allowing us to have as much variety as we possibly can in a very small footprint. So, again, our frozen sales are also above budget from a



Zero Zone RVZC30T2

distribution standpoint. So, I'd like to credit some of that to the Crystal doors and that we are selling more product than we anticipated. From a control standpoint, temperatures are very good. The ice cream products have been very solid and the temperatures are really very well maintained."

Jake Parchem, the store's dairy and frozen food manager, started in the grocery business at age 16. Now 28, Jake says of the low temp tall cases: "I've had a lot of compliments that there's more variety in the tall doors. That's enabled me to carry a few more products than I could have with traditional frozen doors." In other traditional cases Jake has been able to get in only five or six shelves, however, the Zero Zone tall cases provide much more merchandising space.

Jake notes: "With these doors I can get upwards of eight, which is really nice. The height is what I am really impressed with, the fact that you can go higher with some of the products, because the cases just allow it." He finds the extra packout and extra facings to be very beneficial, especially for a store their size and in light of their commitment to offering the variety their demographic expects.

THE REFRIGERATION SYSTEM

The refrigeration system is the workhorse of any supermarket. However, due to the energy efficiency of the Crystal and T2 cases, the Zero Zone system at Fresh Madison Market did not need to be as large as you might see in a traditional supermarket. According to Jeff Maurer: "We've got a smaller rack system, which, in this store, of course, is very important. That was kind of a side benefit because typically you would have a rack system in the mezzanine level that would not be part of a store build-out in a lot of cases. In this particular store, the rack is on the second floor. I'm paying rent on that space and 'common area' maintenance costs as well, so certainly the smaller rack system means I have less space to rent and to pay common



Zero Zone Parallel System

area maintenance costs on. We were able to get the rack into the building by a crane, through a window, which was obviously a huge benefit and [if it were larger] I'm not so sure how we would have been able to get the rack into this building without taking it apart and building it on site. Jeff also noted, "We were able to actually spend less money on the rack system, which certainly helps return our investment that much sooner on this store." Had this store been outfitted with traditional open cases rather than Crystal lineups, the rack frame would have been over three feet longer and would have required an additional 12 tons of medium temp refrigeration or 53% more. This would have increased the horsepower requirements of the refrigeration system by 16hp, which would have increased the size

of the condenser and all associated piping. All told, these additional refrigeration requirements would have cost approximately \$9,500 more—plus a substantial increase in installation cost.

Because the store is located in a multi-level facility, with apartments above it, Fresh Madison Market provided an opportunity to utilize another energy-saving feature. The store was able to reclaim heat from the refrigeration system to heat the store and other areas of the building. To accomplish this, the condenser portion of the refrigeration system was designed differently than a traditional supermarket rack. This customized refrigeration system utilizes a hydronic system to recover waste heat from the refrigeration compressors. The hydronic system uses that reclaimed heat to heat the store and other areas of the building. Ultimately, this negates the need for the store to use natural gas or electricity for this function and results in another sizeable reduction in operational energy costs.

MERCHANDISING

Before Jeff started this venture, he met with his store planner/equipment manager/project manager for the project, Steve Mehmert of Mehmert Store Services to explore his options. Steve suggested a trip to Zero Zone's case division in North Prairie, WI to see the company's display cases up close. Jeff recalls: "We walked through the plant and looked at the cases and I am very happy that Steve brought it to our attention and that we had an opportunity to do the research on the cases, see product in the cases and how that product appeared to our customers. To me, it's all about selling product and merchandising. In addition to the economic efficiencies that we have with the Zero Zone [cases], more importantly to me is how they are merchandised to the customer. I need to sell the product and I think that we have accomplished that. So, I am very excited about the long term benefits of working with the doors and, not only from the sales standpoint and selling more product to the customers, but also on the back side and the savings on energy costs, which are so dramatic."



Crystal Merchandiser with Pre-Packaged Meats

Merchandising the bottom baskets of the Crystal smoked meat cases was initially a concern for Jeff, but after some experimentation, he said: "The product on the bottom shelf is showing very well. There's equal amount of sales on the bottom shelf as there is in the middle, so I've not seen any kind of areas within the doors that appear to be dead spots for us." As far as dairy products goes, we asked Jake Parchem if he had seen any problem with products not selling well on the bottom shelf. Jake commented: "We haven't had an issue with anything on the bottom of the Crystal cases at all. Everything moves at a pretty good clip. So, we are really excited to have that extra space towards the ground."

THE BOTTOM LINE

Having had extensive experience with open cases in the past, Jeff Maurer was cautiously looking forward to seeing just how much less energy the Crystal Merchandisers would use. After all, prior to opening the store he had many conversations with local community groups, where he extolled the energy efficiency of the Crystal cases and told them "how we were doing everything we could to minimize our carbon footprint." "Even after the first 6 weeks the cases had been in operation, I had based my utility expense on my previous experience based upon open cases," he continued. "So, I had taken my previous experience with open cases, reduced the budget based upon my research with the Zero Zone cases and now I am 25% below that budget. So, if we continue with this trend, there will be significant decrease to that expense line and an increase to my net profit line because of it." That trend has continued and, needless to say, Jeff is very pleased with his decision to go with Zero Zone Crystal cases instead of traditional 5-deck open cases. He is similarly pleased about the cost reductions he had on the initial cost of the refrigeration rack and the lowered operational rack costs that are a direct result of the lower refrigeration load requirements of the Crystal Merchandiser.

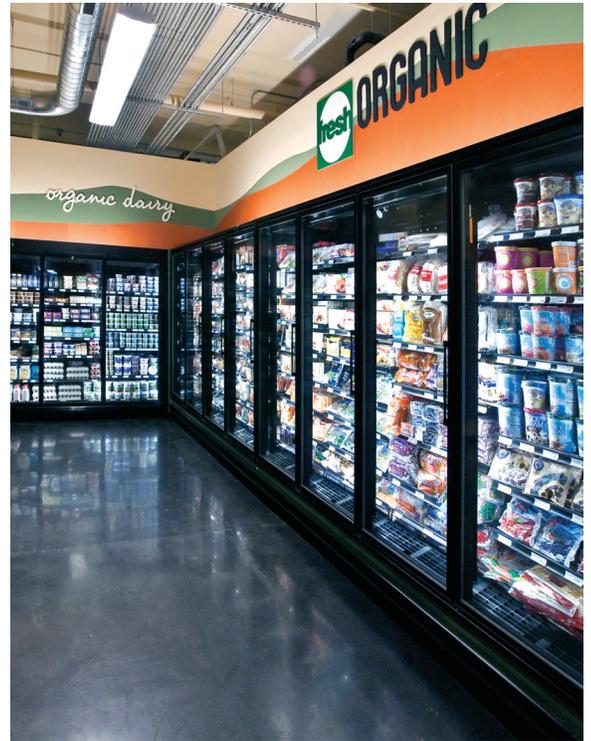
What about recommending the Crystal to others? Jake Parchem sums it up well: "I would tell them the energy efficiency is a big plus. The extra space and extra capacity are also very, very beneficial for those who want to move more product or who are already moving a lot of product and need more space. The bright lights, the LEDs, are just way better than any other traditional 5-deck light that I've seen." To other grocers who might have concerns about stocking a door case versus an open case, Jake says: "I'd tell them it's not much different except that there's a door in front of you that's going to keep the cold in more. You're going to get the extra capacity that you're going to need for some products, which is great. Overall, you're going to get the height difference, too, and you're going to be able to carry more products--going up or down." Perhaps most telling, Jake

mentions his first reaction to seeing the Crystal cases after they were fully stocked: "Standing back and looking, it just looked phenomenal. It's one of the sharpest looking sets that I've seen, honestly. It just looked so much better than a traditional 5-deck. Everything looks like it's got a purpose to be bought instead of it's just sitting on a shelf. With the way the cases look, they seem more minimalist with more glass and more door than actual case, which, to me, is 'all about the grocery business' because you're able to see what it is you're selling more. You're not just looking at this big bulky object that is just a container, basically, for all your product. It just looks that much more sleek--very stylish. It's good that it's almost unnoticeable."

Our interview concluded with these comments from Jeff Maurer: "I couldn't be more positive about my experience. Between our general contractor, the people at Zero Zone, our install contractor and the way it's now working for our customers--and that's really the bottom line--how is the customer going to like it--how is it going to impact sales in a positive fashion--I am very optimistic for what I see and for the future of these cases. I'm extremely glad and happy we made the decision that we did. Everything went very smoothly and just as we had planned."

We think Jeff will be pleased to hear a confirmation from Chelsey, a UW-Madison student and one of his shoppers, who commented about the owner of the store saying, "The students have been talking about like, 'whoever owns that was so smart to open it because it's in such a great location and the pricing is really reasonable--either cheaper or equal to the other grocery stores and convenience stores on campus.'"

Clearly, Jeff Maurer has hit one out of the park with his dream store, the Fresh Madison Market, and Zero Zone is proud to have played a role in his success story.



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