The Caribbean may be known for destination weddings, but destination supermarkets? While grocery shopping may not top the list of things to do in the Cayman Islands, a new Foster’s Food Fair IGA on Grand Cayman Island will give patrons reason to linger. The massive 60,000 square foot market will feature a coffee and juice bar, in-store dining and a plethora of prepared food options. Ideally located in Camana Bay, an area touted as a new urbanist mixed-use community, the market is yet another example of the trend toward experiential grocery shopping, where patrons not only come to shop, but to dine and socialize as well.

The trend has mechanical contractors like Serge and Pierre Beaudet, owners of Cayman Climate Controls Ltd., thinking outside the usual rectangular box when it comes to kitchen exhaust venting. After all, extra food preparation increases the need for exhaust hoods and grease duct, most of which will be exposed to the shopping, dining and cocktail sipping public.

The Foster’s IGA has no fewer than eleven kitchen exhaust hoods, all of which are connected to DuraStack® Pro Factory Built Grease Duct. The duct systems are modular in design and assemble without welding. Components fit together with bands that are designed with grooves that ensure perfect positioning and provide a visual aid for sealant application. The Foster’s installation includes a mix of DuraStack UL-listed, zero-clearance grease duct (double-wall with insulation) and single-wall galvanized duct. The duct is sleek, round and aesthetically appropriate for “grocerants” – a term used to describe these increasingly popular grocery store/restaurant hybrids.

“We decided to use prefab duct on this project mainly because so much of the duct would be visible to the customer,” said Beaudet, whose firm was chosen to install all of the air conditioning and ventilation on the Foster’s project. Although it was his first experience using prefabricated duct, Beaudet insists it will not be his last.
“When the duct is in a visible area, a supermarket for example, I will not use anything else. It is easier to clean and depending of the quality of installation, and I think it is safer.”

No Leaks. No Welding. No Problems.

“The product makes perfect sense in an application like this,” said Agustin Guardiola, Executive Account Manager for Accurex, a DuraVent distributor in Florida and the Caribbean.

Guardiola worked closely with Beaudet throughout the design and planning stages of the Foster’s project, and even visited the jobsite during installation.

“The only advantage that traditional field-welded grease duct has over factory-made duct is that it requires very little planning because it is typically custom-built at the jobsite.”

But this small measure of convenience comes with many downsides. Besides being heavy and clunky looking, field-welded systems lend themselves to a higher probability of field errors and code misses. Poorly lit jobsite conditions lead to imperfect welds that may leak grease and/or water and chemicals used during duct cleaning. Ideally, grease duct should help contain and exhaust fire, but if the duct leaks grease, it can quickly turn a small fire into a catastrophic event that may lead to temporary or even permanent closure of the facility.

Field welding also requires specialized labor—labor that is increasingly scarce, especially for island projects such as this.

“It’s challenging to find any kind of workers on the Islands. Most are from other countries and are here on work permits,” explained Beaudet. “Using pre-fab duct allowed us to get this job done with fewer laborers. We saved labor on duct fabrication and, when applicable, on insulation labor.” Contractors using DuraVent’s prefab grease duct report labor cost savings of 40-50%.

Quick, Relevant Engineering Support

Beaudet chose DuraVent largely based on the manufacturer’s fast and thorough responses to his questions as he researched pre-fab options.

“Our main concern was being able to get the appropriate engineering help in selecting the right product. And we got it.”

From design to delivery, Beaudet said that DuraVent’s responses to his questions were always “quick and relevant.”

Mike Heavener, DuraVent Product Application Manager, provided design and delivery support to the Cayman contractor.

“Serge did his research. He also provided us with a great set of mechanical plans, which we translated into CAD drawings according to the appropriate design codes. From there it was just basic troubleshooting. And, of course, a lot of communication. But that’s how we approach these projects,” said Heavener.
A Tight Ship

Shipping of mechanical components is an area of concern for any project but especially for offshore applications where a single missing or damaged part can unleash a chain reaction of delays. That's why DuraVent takes particular care to make sure that their packaging leaves no room for error or confusion. After all, once removed from the container, workers are expected to be able to properly organize and install the components so that the system comes together seamlessly.

Beaudet could not have been more impressed with the care that was taken with DuraVent's shipping, noting that it was clear that the manufacturer put a lot of thought and effort into making sure the duct would arrive in good condition. Each piece of duct was carefully bubble wrapped and boxed, and manually placed inside a shipping container to ensure safe positioning. Several 2x4 planks were then braced against the products to prevent any possible movement during the journey.

"[The shipping] exceeded my expectations," said Beaudet.

DuraVent ships prefabricated duct for projects around the world, especially throughout the US and Canada, so they have deep expertise in executing appropriate shipping systems. Preparing for an off-shore shipment was no more (or less) challenging than any other project.

"We did what we do for any job. A lot of effort goes into designing these systems and making certain everything fits together once it is at the jobsite. We don't leave any room for error," said Heavener.

As the retail food world continues to evolve to improve consumer experiences with made-to-order meals served in a pleasing environment, so must the approach to mechanical systems. The Caymans Foster's IGA project showcases the evolution of both.

For more information and literature on grease duct systems, please visit: duravent.com/kitchenexhaust • securitychimneys.com/kitchenexhaust