Margaritaville Café's Environmental Restaurant Design Keeps Open Doorways from “Wastin’ Away” Energy

There’s no energy “wastin’ away” at Jimmy Buffett’s Margaritaville Café restaurant even though dozens of linear feet of retractable wall space and other doorways are invitingly open to the great Arizona outdoors.

The openness was the Margaritaville Café design team’s strategy to create an oceanfront tiki hut atmosphere at the new 17,500-square-foot, two-story Glendale, Ariz.-based restaurant, even though its desert location is hundreds of miles from the nearest ocean. The oceanfront theme fits the restaurant’s founder and namesake singer/songwriter, Jimmy Buffett, who has built a music, apparel, restaurant and gourmet food/beverage empire based on the laid-back Key West (Florida) lifestyle he experienced in the 1970’s. “We’ve created the open, unrestricted passages from the restaurant to our adjoining 2,600 square feet of patio areas without the problems of energy inefficiency and infiltrating outdoor weather,” said Michael Taylor, the restaurant’s former general manager who was instrumental in its construction and start-up.

Although the openness was key to the location’s theme, Margaritaville officials did not want to sacrifice energy on its behalf, which would counter its overall corporate green mission.

Saving thousands of dollars of energy per year by keeping the outdoor and indoor environments separate is the feat of 15 air doors provided by Berner International, New Castle, Pa. The air curtains are mounted above each doorway and blow a strategically-engineered curtain of air across each doorway’s threshold. Keeping open the nine eight-foot-tall doorways that range from 8 to 15 feet wide is the job of NanaWall, Mill Valley, Calif., which manufactures a series of secure, thermally-broken glass doors with a patented space-saving retracting mechanism.

The retractable doors were integral to the entire concept of the design team: McBride Co., Miami, Fla., which performs creative design services for restaurants, hospitality and retail markets; Cubellis, Boston, consulting engineering; and Shamut Design & Construction, general contracting and project management. However, Maricopa county codes sent the design team back to the drafting board to solve restrictions on open doorways in restaurants without some type of screen or barrier to prevent flying insect infiltration. Additionally, sanitation codes require restaurants with open doorways to use specially-designated glassware and dinnerware. Using air curtains complied with the sanitation code and allowed Margaritaville Café to use the same branded glasses and tabletop items used in its other 10 company owned locations in the U.S.

County officials suggested air curtains, which are designed to provide a steady stream of air across a doorway to stop insect or outdoor temperature infiltration. Used for decades in industrial settings, air curtain manufacturers have redesigned exterior aesthetics and performances to suit retailers and restaurants. “You see air curtains frequently at kitchen backdoors to control flying insects, but it’s uncommon for restaurants to use them to control environments and save energy like this,” said Taylor, a 16-year veteran of restaurant management.

Depending on the width and height, each open passageway’s interior is outfitted with either a Mark II, Maxair, or E-Zone air curtain that is activated with a magnetic door switch. Each air curtain is made of either stainless steel or clear anodized aluminum, both which match the metal frames of the doorway. Wide doorways have two or three air curtains in tandem. Fidelity Mechanical Contracting, Mesa, Ariz., was the air curtain installer.

Each air curtain has a three-speed fan switch to adjust the air stream velocity to various door heights and outdoor wind conditions. Restaurant managers use the low speed on most air curtains, which provides the latitude to increase velocity, if needed. Volume, which is critical and dependent upon air nozzle design to completely fill the doorway with a continuous air stream, remains uniform throughout the operation.

Margaritaville officials suspect the Glendale location’s use of open doorways and air curtains might serve as design criteria for future locations that also want to take advantage of local weather attributes.

“Green” energy-saving efforts at Glendale, Ariz., location accentuates Margaritaville’s ongoing corporate environmental mission.

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