

New Comfort for Old Spaces + Ramped Up Energy Savings

CHALLENGE -

When a 35,000-sq ft. Romanesque Revival-style structure built in 1888 called for climate control and flying pest protection, they realized only the Mars Air Systems air curtain would do. Central Market York, a public market in a cavernous brick building, occupies nearly the full sprawling city block in York, Pennsylvania and is home to more than 50 vendors selling everything from seafood to fresh produce to prepared meals. Upgrading the energy efficiency of this historic building is a challenge as the structures don't easily adapt to modern precision mechanical systems. To welcome the daily throngs of visitors and food shoppers, the building hosts a series of entry doors yet the multitude of openings introduces flying pests, dust and debris that can threaten food. Repeated opening of entry doors also exposes the interior to the Eastern Seaboard-chilled air in the winter and the stuffy conditions that pervade during the region's humid summers – two harsh conditions which drive unpalatable experiences for shoppers, tourists and workers.

THE SOLUTION

Older buildings, ground up construction and commercial renovations of every kind realize an immediate benefit from the energy savings that follow on the heels of a Mars air curtain installation. For Central Market York, now listed on the National Register of Historic Places, using a bank of Mars Standard air curtain units now provides vital protection from a host of invaders. The Standard unit, Mar's most frequently specified product, is well suited to a multitude of customer-facing applications as a commercial and industrial hybrid. Its ½ horsepower motor produces a protective flow of air for heights up to 10 ft. Deploying the optional heating elements means that York County's frigid winters, which typically hover in the mid-20's°F, don't drive away shoppers or create uncomfortable working conditions. Of incalculable benefit is the boon for Central Market's individual vendor owners given that consumer behavior studies demonstrate shoppers spend more in warm air temperatures. Now with the Mars solution in place to create an appealing...and safe...internal atmosphere, this community gathering spot is as welcoming as it is significant.



STUDIES REVEAL A 6%-9% UPSIDE EFFECT ON WORK PERFORMANCE BASED ON IMPROVED AIR QUALITY AND TEMPERATURE. (WYON 2004)

Campbells

MANAGING WIDE OPEN SPACES

Large cavernous manufacturing centers grapple with complexities - voluminous staff, high traffic, inconsistent climate control, and ongoing pressure to create productive working environments so output goals are hit month after month. In the Campbell Soup Company's sprawling, 2.4 million-sq.-ft. facility, a collection of exterior doors continually introduce outside air to the workspace. Facility managers were using propeller-based fans in an ill-working attempt to barricade the unwanted airflow they blamed for drafts and shrinking productivity. The fans were doubly ineffective because they relied on excessively high horsepower to produce a wide projection of diffused air. The fans were spreading an unfocused blast of air using an excessive amount of energy. The Mars Air Systems air curtain solution was able to produce a precision air barrier with a concentrated blast of air that used only 3 HP versus the fan's excessive 15 hp. Better still, the Mars solution consumes the energy equivalency of one standard metal parking light with a 1500-watt metal halide bulb turned on for one hour and completely eliminated the view obstruction of the fans.



TOO MANY PEOPLE NEED US - IT HAS TO BE RIGHT

When you're as successful as Westmoreland County Food Bank because you serve 7,200 families a month and operate a 40,000 sq.ft. facility that processes 8.6 million pounds of food a year, your food storage equipment needs to work flawlessly. For Westmoreland, facility limitations forced the freezer and evaporator to sit side-by-side which led to a healthy dose of humidity leading to ice and frost on the floor outside the freezer doorway – a safety hazard for both forklifts and workers on foot. When it's too important or costly to be anything other than right, Mars Air Systems is the team you want on your side. Mars has been repeatedly the source for answers when large industrial and foodservice operators need no-fail solutions to vexing humidity, unwanted condensation or accident-provoking pools of water. Deploying air baffles to ride shotgun along side the series of air curtains gave the Westmoreland workers the means to ward off the flowing water that had been a source of slippage, falls and worker injury.



ONLY EXCEPTIONAL PERFORMERS INVITED

When you bring in the world's top entertainment venue designers to build an iconic sports facility valued at \$1.1B, filling the 1.75M sq ft structure with premium equipment that performs with the latest technology is the name of the game. U.S. Bank Stadium, home to the Minnesota Vikings football franchise, is big, bold and best-in-breed. With entry doors that serve as the daily gateway for tens of thousands, they needed the most technologically advanced way to thwart flying pests and keep climatized air inside and harsh winds outside. Now with 25 sizable Mars air curtains, fans experience a halo of heated air during Minnesota winters and an invisible protective barrier from dust and pests year 'round. Down below, the dock doors that service a facility with over 430 food points of sale, have their own protection with a cluster of Mars industrial air curtains designed for environments that need heavy-duty brawn.



KEEPING WIDE OPENINGS FROM ATTRACTING THE WRONG CROWD

When a popular sports bar in Downtown Overland Park, Kansas added a track-guided garage door and a series of fold-out windows along the second-floor dining area to open the space and bring the outdoors in, Johnson County health code regulations threatened to halt the experience-enhancing plans. Prohibitions again open exposure to flying pests in food prep and food serving areas were circumvented when Mars Air Systems was part of a rescue served up to meet regulatory requirements, amplify guest comfort, and cut utility bills. a cleverly designed exterior-mount solution provided a simple ledge to cradle the hard-working air curtain units while doing double duty as an architectural mullion. A painted custom-made protective covering was then placed around the units to shield them from the often harsh Midwestern elements while blending in with the building and appearing to be part of an intentional facade. Now the threat of flies and mosquitos has been halted as the air curtains provide the proven invisible protective shield the health code demands. Able to operate continuously whenever the garage door or windows are open and provide trusted defense, patron experiences are also separated as any drifting cigar or cigarette smoke from guests on the patio is safeguarded from reaching inside diners.





