

Using Screen Doors to Stop More than Bugs

Understanding the National Security Implications of Sectional and Rolling Screen Door Systems in the Food Industry

By Dave Bussière

For years, screen doors have been used in the overhead door industry to keep unwanted visitors like insects and rodents out of production facilities. This has been especially true in the food industries. While that function remains important, National Security concerns about terrorist attacks on food processing facilities has shifted the market.

The Anti-Pest Market

Screen doors were introduced into the food industry as a means of allowing food processing companies to have air circulation within a plant while sealing the workspace from unwanted visitors like insects, mice and other rodents. This environmental control is necessary because defending the integrity of the product is crucial to the population's health.

As such, the primary focus of screen doors was in maintaining the cleanliness needs of food processors while allowing some degree of fresh air and climate control. Within this market, companies used existing door design and shifted the door skins to screens to solve the ventilation and pest control needs of companies that worked with open food products. Both sectional and rolling steel doors are used.

This basic need for environmental control defined the specs required for installations – the size of holes in screens, seals along the side and top jambs, and bottom seals.

AIB standards – AIB is a descendent organization from the American Institute of Bakers – speak to the need for ventilation, barriers against birds, rodents, insects and other pests. AIB Integrated Pest Management states: “While it is important to remove pests from a facility, it is more important to prevent pests from ever having the opportunity to thrive in a packaging area.” This typically focuses on dock and pedestrian entry points.

Because of that market need, Rosy Brown, owner of Rasco Industries, expanded the company's industry association membership beyond the International Door Association (IDA) to include food focused organizations such as the Food Processing Suppliers Association, the International Food Technologists group, and regional food processor associations. Participation in these food organizations, explains Brown, gradually highlighted an issue much larger than keeping out bugs and rodents from a workspace.

“The reality in America is that our food supply is a precious commodity,” notes Brown. “Sadly we need to protect that food supply from vandals and terrorists.”

The Secure Food Market

As food suppliers began to worry about potential infiltrators larger than common rodents, the role of organizations such as the U.S. Department of Agriculture, Homeland Security, the U.S. Council on Foreign Relations and the U.S. Department of Health and Human Services Food and Drug Administration become more relevant to door companies.

The focus shifted from unintentional attacks on food safety by animals and insects, to intentional attacks on the food supply as a means to a greater evil.

The Center for Food Safety highlights the following physical security measures. First, that facilities secure doors (including dock doors and emergency exits), windows, roof openings, skylights, vents, and storage rooms. Second, that a facility minimize and monitor the number of entry points.

More specifically, AIB notes that any open perimeter points and exterior access to storage areas represent new and true security risks.

The Council for Foreign Relations, in a 2006 document dealing with food and agriculture as a target of terrorism, notes that the U.S. government spends over a billion dollars annually keeping the food supply safe. The Council notes that while past terrorist attacks have focused on restaurants, it is earlier points in the food process that are more at risk – including the distribution of foreign grown foods. Attacks could include the introduction of biological and biochemical agents into the food stream.

Hazard Analysis

One of the key issues, from an overhead door and dock specialist perspective, is the Hazard Analysis and Critical Control Point (HACCP) system. HACCP is a preventative approach to food safety. It tries to identify all hazards in the food storage and production systems. It deals with meats, seafood, juices, vegetables, fruit and other food items.

HACCP focuses on seven principles: conducting a hazard analysis, identifying critical control points, establishing limits for each control point, establishing monitoring processes, establishing corrective actions, verifications of the HACCP process, and the keeping of HACCP records. HACCP is potentially and eventually being replaced by ISO 22000.

“As I walk around a food processing facility, I don’t only look at the doors,” explains Brown. “I do look at the doors, their hardware, weatherseals, etc., but I also look for any deficiency in the facility. I want people to see me as an access expert. I can actually help companies with their safety ratings. And that drives business for me.”

This view of the market provides additional sales options to garage door companies. Not only can they sell door and dock systems, but they can expand that to include other access control systems. This includes gate systems that are well removed from docks and pedestrian doors. It would also typically include camera and other monitoring systems. Through computerization, the integration of these varied systems present potential for future sales and service growth.