Insects and rodents are vectors of disease-causing microorganisms which may be transmitted to humans by contamination of food and food-contact surfaces. The presence of insects and rodents is minimized by protecting outer openings to the food establishment. This guide is made available as a quick reference for the protection of outer openings, specifically windows and doors of an establishment.

If the windows or doors of a food establishment are kept open for ventilation or other purposes, the openings shall be protected against the entry of insects and rodents by one of the following:

1. **Screens**
   a. 16 mesh to 1 inch, at a minimum

2. **Air curtains**
   a. All air curtains must meet NSF Standard 37.
   b. Install an air curtain so that a layer of fast moving air is produced vertically downward and directed to blow outward.
   c. The flow of air must run parallel and within 1 inch, inside or outside, across the entire width of the opening.
   d. Minimum air velocities are a 3-inch column of air at 1600-feet per minute measured at 3-feet above the floor for service entrances, and an 8-inch column of air at 600-feet per minute at customer entrances.
   e. All air curtains shall be controlled by approved door-activated micro-switches.

3. **Other effective means** (includes an integrated pest management plan, training of staff, and verification that plan is working). The information provided in Appendix A below provides guidance on how other effective means shall be reviewed and addressed by this Department.

Maricopa County encourages establishments to meet with Plan Review staff for consultation during the design process to ensure designs meet code requirements and regulations and to further ensure future success of your business. To coordinate a consultation please contact us at esplanreview@mail.maricopa.gov or 602.506.6824.
Appendix A

Notices:

- All establishments requesting consideration for alternative means of protecting the outer openings will be evaluated on a case-by-case basis after thorough on-site review and consideration for final approval in order to ensure that the establishment and operation is sufficiently designed and constructed, and processes are implemented and in place to meet the minimum operational requirements. An insufficient request, pest control plan, active managerial control plan, and supporting documentation may be denied, if not found to sufficiently address health hazards.
- An establishment that cannot close its doors/windows, and maintain them in a closed position when potential hazards are observed, will be asked to install either screens or air curtains. This will include but is not limited to drive-up windows and service doors.
- Beverage systems that are not sealed, ice machines, 3-compartment sinks or any other equipment deemed to be of concern with regards to contamination issues will not be approved if immediately adjacent to any openings that lack approved physical barriers (e.g. self-closing doors, approved screens, air curtains, etc.)
- All permit holders should be aware that if pests or other sources of environmental contamination are found during routine inspections, the installation of physical barriers (i.e. air curtains, screening, permanent closure of windows/doors) may be required so as to abate the hazards.

I. GENERAL REQUIREMENTS

Prior to approval of an alternative, effective means for protecting the outer openings, the establishment shall be in good permit standing with the Maricopa County Environmental Services Department (MCESD) and the operator shall demonstrate sufficient compliance with all applicable laws, regulations, and provisions to operate a Food Service & Beverage establishment. Establishments shall operate under adopted FDA Food Code Regulations, Maricopa County Environmental Health Code requirements, and all local jurisdictional codes.

Final approval of the alternative effective means for protection of outer openings will require on-site verification inspections to verify layout and efficacy of the proposed pest control prevention plans.

The establishment shall perform to specified operations in accordance with approved plans, including the pest control plan pursuant to §8-201.12. The establishment shall provide records upon request to the Maricopa County Environmental Services Department or its representatives pursuant to §8-201.12. Subsequent to approval, failure to follow submitted procedures and/or abate pests, birds, insects, rodents, and vermin, resulting in a health hazard, will result in violations against the establishment.

The following shall be provided to the Department:

- Include establishment’s equipment and physical premises layout. Include dimensions on the plan.
- Attach a site plan showing all external walls of the business and the temporary openings related to the request. The site plan shall show all areas adjacent to the openings, such as seating, parking lots (include details on materials used for parking lot), adjacent properties, vacant/unimproved lots, dairy farms, livestock areas, agricultural areas, landfill/transfer station, water/waste water treatment, lush or excessive vegetation, birds, canals, ponds, lakes, fountains, outdoor water features, roads, etc. The site plan shall show all dumpsters, used grease tanks, and all other refuse storage containers, regardless of ownership. It is recommended that photos be included.
Food/beverage preparation, food/beverage storage, warewashing, utensil storage, restrooms, etc. shall be properly protected against the entrance of insects, rodents, and other sources of environmental contamination.

Provide a menu including any information on any juicing or special processes being conducted in the facility. Menus and food/beverage service may be limited or restricted.

Provide a detailed comprehensive written Active Managerial Control Plan that incorporates policies/procedures, training, and verification components. See II Active Managerial Control Requirements below for further guidance.

II. Active Managerial Control Requirements

1. Policy (minimum requirements):
   a. Detailed, written pest control plan by licensed pest control company.
      i. Comprehensive plan should include programs for the following at a minimum: cockroaches, rodents, perimeter, ants, large flies, small flies, birds, mosquitoes, feral animals, and nuisance pests.
      ii. Sufficient external fly and rodent bait stations shall be located at the perimeter of the entire building. All exterior areas on the physical premises shall be inspected daily for any vermin or insect activity.
      iii. Exterior traps and boards shall be serviced by a licensed pest control company.
      iv. Provide adequate approved internal fly lights in the kitchen and dining/bar areas that are serviced and maintained monthly, or as needed, by a licensed pest control company.
      v. Bird netting and additional effective measures may be required to eliminate perching and nesting locations.
      vi. Residual pest control product treatments to abate vermin shall be applied monthly, or as needed, by a licensed pest control company to the exterior resting and sunning areas, doorway/entry points, vertical surfaces/exterior corners, and other targeted high impact areas.
   b. All external tables and customer dining areas/surfaces shall be thoroughly cleaned and sanitized following all product treatments by licensed pest control operators.
   c. Service logs and receipts of all pest control activities shall be maintained on-site for at least 6 months and provided to a Department representative upon request.
   d. Include pest control service frequency.
   e. Provide a pest control service logbook.
   f. Include daily/weekly/monthly sanitation and structural inspection schedules.
   g. In dusty and/or inclement weather conditions or if flies/pests are observed in the facility, all exterior openings shall remain in the closed position. In addition, if flies/pests are observed in the facility, the pest control company may need to reassess facility to ensure adequate protection is provided.

2. Training: Describe how employees are trained on this policy and by whom. Instructions should include initial and applicable refresher training.

3. Verification: Describe who is responsible for verifying the policy is being followed, how the verification is conducted, and how the adjustments are made if the policy is not working.

III. RESOURCES

1. Active Managerial Control Template

2. FDA – Pest Control in Food Establishments
   http://www.accessdata.fda.gov/ORAU/PestControlFood/indexMenu.htm