SECTION 23 38 13 –
COMMERCIAL KITCHEN VENTILATION
(PERFORMANCE SPECIFICATION)

PART 1 – GENERAL

1.01 INTENT

This specification establishes mandatory performance requirements for kitchen exhaust systems to protect Airport-owned infrastructure including solar arrays, roof membrane, roof top equipment and systems and aircraft. Systems that allow grease discharge impacting these assets are unacceptable at any time.

1.02 REFERENCES

- California Mechanical Code (CMC)
- NFPA 96
- UL 710 / 710B
- UL 8782 (if PCU used)
- ASTM F1704
- California Title 24

1.03 NON-COMPLIANCE

- Any system failing to meet performance intent, as determined by the Owner, based on observed field conditions, shall be rejected regardless of manufacturer claims.

1.04 SUBMITTALS

- ASTM F1704 capture and containment data
- Lifecycle cost documentation
- Maintenance and cleaning schedule
- Shop drawings and airflow calculations
- Proof of grease discharge mitigation
- Description of system performance under comparable operating conditions (field installations or third-party verification, if available)

PART 2 – PRODUCTS

2.01 REQUIRED SYSTEM CHARACTERISTICS

- Continuous grease extraction via fixed baffle system equipped with water-wash or equivalent continuous grease removal system; system shall demonstrably reduce grease loading to the duct and discharge stream to levels that prevent downstream deposition (no passive-only systems permitted)

PART 2 – PRODUCTS (CONT.)

- Integrated active grease mitigation (UV or demonstrably equivalent active grease destruction technology)
- System shall minimize grease aerosol discharge to a level that prevents deposition on rooftop surfaces and equipment to protect rooftop and solar installations
- Where discharge cannot meet these requirements at the hood level, a listed PCU/ESP system (UL 8782) SHALL be provided

2.02 PROHIBITED SYSTEMS

- Dry baffle-only systems
- UV-only systems without wash-down
- Systems requiring frequent manual cleaning to maintain performance
- Systems relying on maintenance frequency to achieve compliance

PART 3 – EXECUTION

3.01 INSTALLATION

- Install per CMC and NFPA 96
- Provide welded grease duct with slope and cleanouts
- Coordinate discharge away from solar arrays
- Discharge location shall be coordinated to prevent exposure to solar arrays and critical rooftop equipment

3.02 OWNER PROTECTION

- Any visible grease deposition observed on rooftop, solar panels, or adjacent systems shall be grounds for system rejection and corrective action at Contractor expense
- Repeated occurrences shall require system modification or replacement at Contractor expense

3.03 COST RESPONSIBILITY AND CORRECTIVE ACTION

- Concessionaire-Tenant shall be fully responsible for all costs associated with system non-performance, including but not limited to cleaning, repair, replacement, or protection of Authority-owned infrastructure impacted by grease discharge.

- Costs incurred by the Authority for inspection, cleaning, maintenance, or remediation resulting from inadequate grease mitigation shall be backcharged to the responsible party without limitation
- System compliance shall not be interpreted based solely on design intent or manufacturer claims, but on actual field performance
- Continued non-compliance or repeated grease deposition events shall require system modification or full replacement, as directed by the Authority, at no additional cost to the Authority
- Acceptance of the system at time of installation does not relieve the Contractor or Tenant from ongoing responsibility to meet performance requirements

END OF SECTION