

COOKING EQUIPMENT VENTILATION STANDARD

Description: The chart below provides design ventilation requirements for all cooking equipment within the Seattle Tacoma International Airport (STIA). These requirements have been established mutually by the Port of Seattle Fire, Building, ADR, and F&I departments.

Code Minimum (Fire and Building Departments):

1. International Building Code, latest applicable version.
2. International Fire Code, latest applicable version.
3. International Mechanical Code, latest applicable version.

Specifically:

- IMC 507.2 Type I hoods.
- IMC 507.3 Type II hoods
- IMC 507.1.2 Domestic cooking appliances used for commercial purposes

	Odor	Heat	Steam	Vapor	Grease	Smoke
Type I				X	X	X
Type II	X	X	X	X		
Targeted Exhaust (Hood over equipment connected to general exhaust)	X	X				
General Exhaust	X					

Port Specific Requirements/Regulations

1. Ventless equipment is not allowed at STIA unless vented to the outside.
2. All ADR Spaces to be considered commercial spaces
3. Appliances that only "warm" & do not cook may be provided in the terminal upon the discretion of the Port of Seattle. See preceding table and/or submit type of use and type of equipment for determination of ventilation requirements.
4. Kiosks with kitchen equipment shall be designed per the table below
5. All equipment hoods (Type I & Type II) shall be designed by a licenced mechanical engineer in accordance with the STIA Mechanical Systems Standards.

COOKING EQUIPMENT	TYPE I	TYPE II	TARGETED EXHAUST	GENERAL HVAC	RATIONALE FOR CATEGORIZATION
Broiler	X				
Convection Oven	X	O			Equipment will be evaluated based on its capability. Tenants may request a variance based on specific uses/menu. In general, if the oven is used for cooking a Type I shall be required. If the oven is used only to warm a Type II may be acceptable.
Conveyor Toaster	X	O	O		Tenants may request a variance based on specific uses/menu. Specifically, if toaster warms bread only targeted exhaust would be acceptable. Tenant may request a variance if warming of foods, other than bread, that is pre-cooked. Raw meat requires Type I
Conveyorized Oven	X	O	O		Tenants may request a variance based on specific uses/menu. Specifically, if oven warms bread only targeted exhaust would be acceptable.
Dishwasher		X			Chemical dishwashers are not allowed. Rinse temperature for dishwasher must be 140° F minimum per the health department.
Glasswasher, Undercounter			X	O	General HVAC is acceptable if the designer captures the heat and moisture load within the ventilation load for the space
Electric Range	X				
Fry Dump	X				
Fryer	X				
Gas or Open Flame Equipment	X				
Griddle	X				
Microwave (non retail)			X	O	Microwave shall only be used to warm/reheat food. In a non-commercial application, such as a break room or other tenant space for employee use, a limit of 3 microwaves shall be allowed with general HVAC. More than 3 microwaves in a space will require targeted exhaust.
Microwave (commercial use)			X		All ADR & Tenant spaces to be considered commercial use. Microwave shall only be used to warm/reheat food.
Panini Grill	X	O			Exhaust duct to be welded liquid tight, type 304 or 316 stainless steel.
Pasta Cooker		X			
Pizza Oven	X	O			Exhaust duct to be welded liquid tight, type 304 or 316 stainless steel.
Pressure Cooker		X			
Rice Cooker		X			
Rotisserie	X				
Salamander	X				
Toaster, Drop-in Slice			X	O	In a non-commercial application, such as a break room or other tenant space for employee use, a limit of 3 drop toasters shall be allowed with general HVAC. More than 3 toasters in a space will require targeted exhaust.
Solid Fuel Equipment	X				
Soup Warmer			X		Max temperature 205° F
Steam Table		X			
Steamer		X			
Warming Table (Dry/No Steam)			X		

Toaster Oven			X	O	General HVAC may be approved for use in non-commercial application, such as a break room or other tenant space for employee use. 600 Watt or less
Waffle Iron			X		
Wok	X				
Rapid Cook Ovens	X		O		Rapid cook ovens, such as "Turbochef" products, shall be provided with targeted exhaust if only used to warm foods. If intent is to cook items within the oven, a Type I hood shall be required. Equipment data sheets as well as proposed menu shall be submitted to POS during design development for review.
Other Commercial Cooking Appliances	X	O	O	O	If tenant proposes to use a piece of equipment not listed above they should submit equipment data sheets and a proposed menu during design development . POS shall determine whether a Type I, Type II, or Targeted Exhaust is required based on POS standards and relevant codes.
Other Residential Cooking Appliances	X	O	O	O	If tenant proposes to use a piece of equipment not listed above they should submit equipment data sheets and a proposed menu during design development . POS shall determine whether a Type I, Type II, or Targeted Exhaust is required based on POS standards and relevant codes.

X: REQUIRED EXHAUST MEASURE
O: ALTERNATE EXHAUST MEASURE PER APPROVED EXCEPTION