



Clark County Fire Department

FIRE PREVENTION BUREAU

4701 W. Russell Road • Las Vegas, NV 89118

John Steinbeck, Fire Chief

Kelly Blackmon, Sr. Deputy Fire Chief/Fire Marshal

Danny Horvat, Assistant Fire Chief • Wayne Dailey, Assistant Fire Chief



PERMIT GUIDE INDUSTRIAL OVENS

This guide is to assist in the permitting process for obtaining an annual renewable operational permit to operation an industrial oven regulated by Chapter 30. An annually renewable operational permit is required per section 105.6.24 of the IFC.

PERMIT REQUIREMENTS:

- **An Industrial Oven Permit is required for all Industrial Ovens that have total input exceeding 150,000 Btu/hr. or have the presence of flammable volatiles or combustible material processed or heated in the furnace.**
- A fire protection system is **not** needed for the oven in addition to your Industrial Oven Permit when you can demonstrate or provide the following information for the oven.
 - Demonstrate by calculation that the combustible concentration in the heating chamber **cannot exceed 25% of the Lower Flammability Limit (LFL)**. See CCFC sections 3006.1 and 3006.2
 - Provide the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) for the powder being used in powder coating showing that it has volatiles.

APPLICABLE CODES:

The following codes and standard apply to this permit.

- *International Fire Code, 2018 edition (IFC)*
- *Clark County Fire Code Amendments, 2018 edition (CCFC)*
- *NFPA Standard for Ovens and Furnaces, NFPA 86 2019 Edition*

Link to CCFC: See the amendments to codes using the link below:

https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty_FireCodeAmendments2018.pdf?t=1598331770575&t=1598331770575

SUBMITTAL REQUIREMENT CHECKLIST:

The listed requirements in this guide are not intended to be all inclusive, nor do they entail a limit to the extent of the information, etc., which may be necessary to properly evaluate the submitted plans and documents. Not all items may apply to your project.

Construction Documents: Provide all applicable information that pertains to your permit.

1. Project name, address, and APN (Assessor's Parcel Number).
2. Contractor's/Owner's contact information.

BOARD OF COUNTY COMMISSIONERS

JAMES B. GIBSON, Chair • JUSTIN JONES, Vice Chair

MICHAEL NAFT • ROSS MILLER • WILLIAM McCURDY II • TICK SEGERBLOM • MARILYN KIRKPATRICK
KEVIN SCHILLER, County Manager

3. Provide **Submittal** showing the following items and information.
 - Provide a complete floor plan for the project showing the operation locations and equipment, the location of oven (include length and width), ensure there is a minimum separation distance of 2.5 feet for any unrelated stock /combustible materials from the oven.
 - Show the fire extinguisher location(s) and type(s):
 - Provide extinguishers in accordance with IFC 906, depending on type of material utilized and class of fire hazards present.
 - Extinguishers shall be provided no closer than 15ft no more than 50ft
 - If there are flammable/combustible volatile(s) present you must.
 - A. Identify the fire suppression system for the oven. See Permit Requirements above for additional information.
 - B. Identify the ventilation for the oven.
 - Ensure separate exhaust system is provided.
 - Identify the system interlocks. The conveyors and fuel source are to shut down if ventilation system fails.
 - Identify the High Temperature Limiter Switch and state the maximum temperature set point. (This device will shut down the heat source if operating temperature exceeds the set point.)
 - C. State the temperatures at combustible ceilings and floors; (to be less than 160°F/71°C.)
 - D. Identify the fuel piping and source:
 - State the fuel source for oven and amount stored; if applicable.
 - Identify the shut-off valve locations: (ensure that the valve position has a permanent visual indicator of the Open and Closed positions. It shall be located remote from furnace and readily accessible.
 - Show that the fuel supply lines are within 6 feet of the oven served.
4. Provide a copy of manufacturer's specification sheets for the oven including the engineering standard for the unit. All equipment shall be listed for its use.

For Class A solvent atmosphere ovens: Provide copy of the oven nameplate with the following design data:

 - Solvent used:
 - The number of gallons used per batch or per hour of solvent entering the oven:
 - The required purge cycle time (seconds).
 - The oven operating pressure.
 - The exhaust blower rating in cubic feet per minute (cfm) for the number of gallons of solvent per hour or batch at the maximum operating temperature:
 - For low-oxygen ovens: the maximum allowable oxygen concentration shall be included in place of the exhaust blower rating.

PERMIT DURATION:

Industrial Oven permits are Operational Permits and are limited to a duration of one (1) year and shall be renewed annually. If any changes are made; revisions will need to be submitted.