

ORANGE COUNTY FIRE AUTHORITY



FIRE EXTINGUISHING SYSTEMS FOR COMMERCIAL COOKING OPERATIONS

<INSERT LOCATION MAP THAT INCLUDES MAJOR CROSS STREETS PROVIDING SITE ACCESS>

VICINITY MAP

OCFA STAMP

PROJECT INFORMATION REQUIREMENTS

PROJECT LOCATION:
LEGAL DESCRIPTION FOR NEW TRACTS:
BUILDING DEPARTMENT HAVING JURISDICTION:

DETAILED SCOPE OF WORK
NOTE: OCFA WILL ONLY REVIEW WORK OUTLINED IN SCOPE OF WORK
PR CODE(S): PR335

NUMBER OF SYSTEMS

SYSTEM MANUFACTURER

SYSTEM MODEL

NUMBER OF FLOW POINTS

PIPING CALCULATIONS

OCFA STANDARD HOOD SYSTEM NOTES

- THIS SYSTEM IS DESIGNED IN ACCORDANCE WITH ANSI/UL 300--05(R2010), 2017 NFPA 17A; 2017 NFPA 96, 2025 CFC, 2025 CMC, AND THE MOST RECENT MANUFACTURER'S MANUAL.
- OCFA FINAL INSPECTION REQUIRED. PLEASE SCHEDULE ALL FIELD INSPECTIONS AT LEAST 48 HOURS IN ADVANCE. CALL OCFA INSPECTION SCHEDULING AT 714-573-6150. PHASING OF INSPECTIONS MAY REQUIRE ADDITIONAL FEES. INSPECTIONS CANCELED AFTER 1 P.M. ON THE DAY BEFORE THE SCHEDULED DATE WILL BE SUBJECT TO A RE-INSPECTION FEE.
- ALL GAS FUELED, ELECTRICALLY POWERED, AND HEAT-PRODUCING EQUIPMENT LOCATED UNDER THE HOOD SHALL SHUT DOWN UPON ACTIVATION OF THE EXTINGUISHING SYSTEM. CFC 904.11.2
- DISCHARGE NOZZLES SHALL BE LOCATED AND INSTALLED AS SHOWN IN THE MANUFACTURER'S LISTED INSTALLATION MANUAL AND THE OCFA APPROVED PLANS. ALL DISCHARGE NOZZLES SHALL BE PROVIDED WITH CAPS, COVERS, OR OTHER SUITABLE PROTECTIVE DEVICES. NFPA 17A 4.3.1.5
- PIPING SHALL BE RIGIDLY SUPPORTED TO PREVENT MOVEMENT (SHALL NOT BE ABLE TO SWAY FOR CLEANING). SWIVEL NOZZLES SHALL BE ROTATED TO A PREDETERMINED AIMING POINT AND THEN TIGHTENED TO HOLD THAT ANGLE. CAREFUL ATTENTION SHALL BE GIVEN AT THE TIME OF DESIGNING THE SYSTEM AS NOZZLES CANNOT BE MOVED "OUT OF THE WAY" ONCE APPROVED IN THE FIELD. ANY MOVING OF THE PIPE OR NOZZLES SHALL REQUIRE AN APPROVED CONTRACTOR TO EVALUATE THE PIPE/NOZZLE LAYOUT.
- MOVABLE COOKING EQUIPMENT SHALL BE PROVIDED WITH A MEANS TO ENSURE THAT IT IS CORRECTLY POSITIONED IN RELATION TO THE APPLIANCE DISCHARGE NOZZLE DURING COOKING OPERATIONS. NFPA 17A 5.6.4
- FRYERS SHALL BE SEPARATED FROM SURFACE FLAME APPLIANCES BY 16 INCHES OR AN 8 INCH STEEL OR TEMPERED GLASS Baffle PLATE SHALL BE PROVIDED BETWEEN FRYERS AND SURFACE FLAMES. CMC 515.0
- MANUAL PULL STATIONS SHALL BE LOCATED NO HIGHER THAN 4 FEET ABOVE FINISHED FLOOR AND SHALL BE READILY ACCESSIBLE FOR USE AT OR NEAR A MEANS OF EGRESS FROM THE COOKING AREA A MINIMUM OF 10 FEET AND MAXIMUM OF 20 FEET FROM THE KITCHEN EXHAUST SYSTEM. THE DISTANCE IS MEASURED FROM THE EDGE OF THE HOOD. CFC 904.11.1
- WHERE MORE THAN ONE MANUAL ACTUATOR (PULL) IS INSTALLED, THEY SHALL BE IDENTIFIED WITH A PERMANENT SIGN INDICATING WHICH EXTINGUISHING SYSTEM WILL ACTIVATE.
- A CLASS K-RATED EXTINGUISHER SHALL BE PROVIDED WITHIN A MAXIMUM OF 30 FEET OF COOKING EQUIPMENT. PLACEMENT IS AT THE DISCRETION OF THE INSPECTOR. ADDITIONAL EXTINGUISHERS MAY BE REQUIRED BASED ON TRAVEL DISTANCE FOR SOLID FUELED EQUIPMENT OR MULTIPLE FRYERS WITH 6 SQUARE FOOT SURFACE AREA OR GREATER. PORTABLE FIRE EXTINGUISHERS SHALL BE CONSPICUOUSLY LOCATED ALONG NORMAL PATHS OF TRAVEL WHERE THEY ARE READILY ACCESSIBLE. PORTABLE FIRE EXTINGUISHERS SHALL BE MAINTAINED IN ACCORDANCE WITH NFPA AND CFC REQUIREMENTS. CFC 906.1 & 906.2
- A PLACARD SHALL BE CONSPICUOUSLY PLACED NEAR EACH EXTINGUISHER THAT STATES: "FIRE PROTECTION SYSTEM HAS BEEN ACTIVATED UNLESS FAN SHUTDOWN IS REQUIRED BY A LISTED COMPONENT OF THE VENTILATION SYSTEM OR BY THE DESIGN OF THE EXTINGUISHING SYSTEM."
- THE HOOD EXHAUST FAN SHALL NOT BE REQUIRED TO START UPON ACTIVATION OF THE EXTINGUISHING SYSTEM IF THE EXHAUST FAN AND ALL COOKING EQUIPMENT SERVED BY THE FAN HAVE BEEN SHUT DOWN. NFPA 96 8.2.3.2
- THE EXHAUST FAN SHALL BE PROVIDED WITH A MEANS SO THAT THE FAN IS ACTIVATED WHEN ANY APPLIANCE UNDER THE HOOD IS TURNED ON. CMC 515.2.3 AND NFPA 96 8.2.3.3
- THE INSIDE EDGE OF THE HOOD SHALL OVERHANG A HORIZONTAL DISTANCE OF NOT LESS THAN 6 INCHES BEYOND THE EDGE OF THE COOKING SURFACE ON ALL OPEN SIDES, AND THE VERTICAL DISTANCE BETWEEN THE LIP OF THE HOOD AND THE COOKING SURFACE SHALL NOT EXCEED 4 FEET UNLESS THE MANUFACTURER'S SPECIFICATIONS STATES OTHERWISE. CMC 508.4.1

SYSTEM MONITORING

WHERE A BUILDING FIRE ALARM OR MONITORING SYSTEM IS INSTALLED, THE AUTOMATIC FIRE-EXTINGUISHING SYSTEM(S) SHALL BE MONITORED IN ACCORDANCE WITH NFPA 72, CFC 904.3.5. MONITORING OF COMMERCIAL COOKING HOOD AND DUCT SYSTEMS WILL BE FIELD VERIFIED ONLY AND INSTALLATION MUST BE PERFORMED BY A CONTRACTOR WITH A VALID C-10 LICENSE. A SEPARATE FIRE ALARM PLAN IS NOT REQUIRED

SYSTEM AND EQUIPMENT MAINTENANCE

- 904.12.5. OPERATIONS AND MAINTENANCE: AUTOMATIC FIRE EXTINGUISHING SYSTEMS PROTECTING COMMERCIAL COOKING SYSTEMS SHALL BE MAINTAINED IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS, TITLE 19, DIVISION 1, CHAPTER 5 AND SECTIONS 904.12.5.1 THROUGH 904.12.5.3, SECTIONS 904.12.5.1 THROUGH 904.12.5.3.
- THE APPROVED SET OF PLANS SHALL BE DELIVERED BY THE CONTRACTOR TO THE OWNER/MANAGER TO BE KEPT ON-SITE FOR REFERENCE AND INSPECTION RECORDS ALONG WITH THE COMPLETED "WET CHEMICAL ACCEPTANCE TEST REPORT"
- THE OWNER SHALL BE PROVIDED WITH A COPY OF THE MANUFACTURER'S LISTED INSTALLATION AND MAINTENANCE MANUAL OR LISTED OWNER'S MANUAL.
- WET CHEMICAL SYSTEMS SHALL BE PROVIDED WITH AN AUDIBLE OR VISUAL INDICATOR TO SHOW THAT THE SYSTEM IS IN A READY CONDITION OR IS IN NEED OF RECHARGING. NFPA 17A 4.8
- THE EXTINGUISHING SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH THE CURRENT CFC, CMC, NFPA 16, NFPA 17A, NFPA 17 AND MANUFACTURER'S REQUIREMENTS AS APPLICABLE.
- FOR EXISTING HOOD EXTINGUISHING SYSTEMS, WHERE CHANGES IN THE COOKING MEDIA, POSITIONING OF COOKING EQUIPMENT OR REPLACEMENT OF COOKING EQUIPMENT OCCUR, PLANS SHALL BE SUBMITTED TO THE OCFA FOR THE AUTOMATIC FIRE-EXTINGUISHING SYSTEM AND SHALL COMPLY WITH THE APPLICABLE PROVISIONS. CFC SECTIONS 904.11.6.1 APPROVAL FROM THE ORANGE COUNTY HEALTH CARE AGENCY AND THE BUILDING DEPARTMENT SHALL BE REQUIRED FOR ALL NEW EQUIPMENT. A HIGHER AIR EXCHANGE MAY BE REQUIRED BASED ON THE TYPE OF EQUIPMENT BEING PROPOSED. CMC 507.1 AND NFPA 96:4.1.4.
- EXTINGUISHING SYSTEMS SHALL BE SERVICED AT LEAST EVERY 6 MONTHS, OR AFTER ACTIVATION OF THE SYSTEM, BY A QUALIFIED TRAINED TECHNICIAN. MAINTENANCE SHALL BE CONDUCTED BY A CERTIFIED TECHNICIAN IN ACCORDANCE WITH THE MANUFACTURER'S LISTED INSTALLATION AND MAINTENANCE MANUAL. CFC 901.6.2 NFPA 17A SECTION 47.3
- FUSIBLE LINKS SHALL BE REPLACED ANNUALLY. CFC 904.12.5.3
- THE HOOD VENTILATION SYSTEM SHALL BE OPERATED AT THE REQUIRED RATE OF AIR MOVEMENT, AND APPROVED GREASE FILTERS SHALL BE IN PLACE WHEN COOKING UNDER A KITCHEN GREASE HOOD IS OPERATED.
- HYDROSTATIC TESTING OF THE WET CHEMICAL EXTINGUISHING SYSTEM SHALL BE COMPLETED IN INTERVALS NOT EXCEEDING 12 YEARS. NFPA 17A 7.5
- ALL INTERIOR SURFACES OF THE EXHAUST SYSTEMS SHALL BE MADE ACCESSIBLE FOR CLEANING AND INSPECTION PURPOSES. IF DURING THE INSPECTION IT IS FOUND THAT THE HOOD, GREASE REMOVAL DEVICES, FANS, DUCTS OR OTHER APPURTENANCES HAVE AN ACCUMULATION OF GREASE, SUCH COMPONENTS SHALL BE CLEANED. FLAMMABLE SOLVENTS OR OTHER FLAMMABLE CLEANING AIDS SHALL NOT BE USED. CMC 507.1 ITEM 6, CFC 609.3.3.2

TESTING AND INSPECTION

THE SYSTEM SHALL BE PRE-TESTED PRIOR TO OCFA INSPECTION TO DETERMINE THAT THE SYSTEM IS PROPERLY INSTALLED AND FUNCTIONS IN ACCORDANCE WITH THE APPROVED PLANS AND THE MANUFACTURER'S INSTALLATION AND MAINTENANCE MANUAL. THE COMPLETE TECHNICAL MANUAL SHALL BE MADE AVAILABLE TO THE INSPECTOR. PLEASE NOTE, IF A FULL MANUAL IS NOT AVAILABLE, THE INSPECTION MAY BE DISCONTINUED, AND A RESCHEDULING FEE WILL APPLY. TESTING DURING THE OCFA INSPECTION SHALL INCLUDE A MANUAL AND AUTOMATIC ACTIVATION VIA FUSIBLE LINK. A SHUT DOWN OF ALL ELECTRICAL AND GAS COOKING EQUIPMENT SHALL ALSO BE DEMONSTRATED. NOZZLE TYPE, HEIGHT, AND ORIENTATION RELATIVE TO PLACEMENT OF COOKING APPLIANCES WILL ALSO BE VERIFIED DURING THE INSPECTION.

TABLE 609.3.3.1 COMMERCIAL COOKING SYSTEM INSPECTION FREQUENCY

Type of Cooking Operations as determined by Fire Code Official	Minimum Frequency of Inspections
High-Volume cooking operations such as 24-hour cooking, chartrolling or wok cooking	3 months
Low-Volume cooking operations such as places of religious worship, seasonal businesses and senior centers	12 months
Cooking operations utilizing solid fuel burning cooking appliances	1 month
All other cooking operations	6 months

THE ENTIRE DUCT SYSTEM SHALL BE INSPECTED AT A MINIMUM PER TABLE 609.3.3.1. IF DURING THE INSPECTION IT IS FOUND THAT THE HOOD, GREASE REMOVAL DEVICES, FANS, DUCTS OR OTHER APPURTENANCES HAVE AN ACCUMULATION OF GREASE, SUCH COMPONENTS SHALL BE CLEANED. CFC 609.3.3

SOLID FUEL HANDLING AND ASH REMOVAL

- SOLID FUEL SHALL BE IGNITED WITH A MATCH, AN APPROVED BUILT-IN GAS FLAME, OR OTHER APPROVED IGNITION SOURCE.
- COMBUSTIBLE OR FLAMMABLE LIQUIDS SHALL NOT BE USED TO ASSIST IGNITION.
- MATCHES AND OTHER PORTABLE IGNITION SOURCES SHALL NOT BE STORED IN THE VICINITY OF THE SOLID FUEL APPLIANCE.
- SOLID FUEL SHALL BE ADDED TO THE FIRE AS REQUIRED IN A SAFE MANNER AND IN QUANTITIES AND WAYS NOT CREATING A HIGHER FLAME THAN IS REQUIRED.
- LONG-HANDLED TONGS, HOOKS, AND OTHER REQUIRED DEVICES SHALL BE PROVIDED AND USED TO SAFELY ADD FUEL, ADJUST THE FUEL POSITION, AND CONTROL THE FIRE WITHOUT THE USER HAVING TO REACH INTO THE FIREBOX.

ASH PROTECTION

- ASH, CINDERS, AND OTHER FIRE DEBRIS SHALL BE REMOVED FROM THE FIREBOX AT REGULAR INTERVALS TO PREVENT INTERFERENCE WITH THE DRAFT TO THE FIRE AND TO MINIMIZE THE LENGTH OF TIME THE ACCESS DOOR IS OPEN.
- ALL ASH SHALL BE REMOVED FROM THE CHAMBER A MINIMUM OF ONCE A DAY.
- THE ASH SHALL BE SPRAYED WITH WATER BEFORE REMOVAL TO EXTINGUISH ANY HOT ASH OR CINDERS AND TO CONTROL THE DUST WHEN THE ASH IS MOVED.

ASH REMOVAL PROCESS

- TOOLS SHALL BE PROVIDED SO THAT ASH REMOVAL CAN BE ACCOMPLISHED WITHOUT HAVING TO REACH INTO THE CHAMBER.
- THE ASH SHALL BE SPREAD OUT GENTLY IN SMALL LOTS ON THE CHAMBER FLOOR OR ON A SHOVEL, TO BE SPRAYED BEFORE IT IS REMOVED TO THE METAL CONTAINER OR CART. IF THE FLOOR OF THE CHAMBER IS OF A METAL THAT IS SUBJECT TO RAPID CORROSION FROM WATER, THEN A NONCOMBUSTIBLE, CORROSION-RESISTANT PAN SHALL BE PLACED JUST OUTSIDE THE CLEANOUT DOOR FOR THIS PURPOSE.
- THE ASH SHALL BE CARRIED TO A SEPARATE HEAVY METAL CONTAINER (OR DUMPSTER) USED EXCLUSIVELY FOR THE PURPOSE.
- OTHER SAFETY REQUIREMENTS
- METAL-FABRICATED SOLID FUEL COOKING APPLIANCES SHALL BE LISTED FOR THE APPLICATION WHERE PRODUCE IN PRACTICAL QUANTITIES OR SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- WHERE LISTED, METAL-FABRICATED SOLID FUEL COOKING APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTINGS AND WITH THE APPLICABLE REQUIREMENTS OF THIS STANDARD.
- NO SOLID FUEL COOKING DEVICE OF ANY TYPE SHALL BE PERMITTED FOR DEEP FAT FRYING INVOLVING MORE THAN 1 QUART OF LIQUID SHORTENING, NOR SHALL ANY SOLID FUEL COOKING DEVICE BE PERMITTED WITHIN 3 FEET OF ANY DEEP FAT FRYING UNIT.
- SITE-BUILT SOLID FUEL COOKING APPLIANCES SHALL BE SUBMITTED FOR APPROVAL TO THE AUTHORITY HAVING JURISDICTION BEFORE BEING CONSIDERED FOR INSTALLATION.
- ALL UNITS SUBMITTED TO THE AUTHORITY HAVING JURISDICTION SHALL BE INSTALLED, OPERATED, AND MAINTAINED IN ACCORDANCE WITH THE APPROVED TERMS OF THE MANUFACTURER'S INSTRUCTIONS AND ANY ADDITIONAL REQUIREMENTS SET FORTH BY THE AUTHORITY HAVING JURISDICTION.

APPLICABLE CODES

- 2025 CALIFORNIA FIRE CODE
- 2025 CALIFORNIA BUILDING CODE
- 2025 CALIFORNIA RESIDENTIAL CODE
- 2025 CALIFORNIA WILDLAND URBAN INTERFACE CODE
- 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE
- 2025 CALIFORNIA MECHANICAL CODE
- 2025 CALIFORNIA ELECTRICAL CODE
- 2025 CALIFORNIA PLUMBING CODE
- 2025 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
- APPLICABLE NFPA STANDARDS <INSERT YEAR & NFPA STANDARD NUMBER(S)>
- LOCALLY ADOPTED ORDINANCES CITY: <INSERT CITY>
- OCFA GUIDELINES
- CONDITIONS OF APPROVAL CITY: <INSERT CITY PLANNING DEPARTMENT>

DEFERRED SUBMITTALS (CHECK ALL THAT APPLY)

THIS PROJECT HAS BEEN PERMITTED WITHOUT REVIEW AND/OR APPROVAL OF THE FOLLOWING DEFERRED SUBMITTALS. PLANS APPROVED BY OCFA SHALL BE OBTAINED FOR EACH DEFERRED ITEM LISTED BELOW PRIOR TO COMMENCING ANY WORK WITHIN THE SCOPE OF SUCH DEFERRAL. DEFERRALS MUST BE REVIEWED AND ACCEPTED BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO SUBMITTING FOR REVIEW WITH OCFA. PORTIONS OF THE PROJECT THAT ARE DEFERRED SHALL BE SUBJECT TO THE CODES, STANDARDS, AND OTHER APPLICABLE REQUIREMENTS IN FORCE ON THE DATE THAT THE DEFERRED PLAN IS SUBMITTED TO OCFA.

- CHEMICAL USE AND/OR STORAGE
- FUEL TANK (FOR GENERATOR, IF OVER 60 GALLONS)
- BATTERY/ENERGY STORAGE SYSTEM
- UNDERGROUND SYSTEM SERVING SPRINKLERS, STANDPIPES, AND/OR PRIVATE HYDRANTS
- SPRINKLER SYSTEM
- STANDPIPE SYSTEM
- FIRE PUMP
- ALARM SYSTEM

PREREQUISITE PLANS

- PLANNING APPLICATION SR: <INSERT SERVICE REQUEST NUMBER>
- FIRE MASTER PLAN SR: <INSERT SERVICE REQUEST NUMBER>
- FUEL MODIFICATION PLAN SR: <INSERT SERVICE REQUEST NUMBER>

REVISION

ORIGINAL PLAN SR: <INSERT SERVICE REQUEST NUMBER>
COPY OF ORIGINAL APPROVED PLAN REQUIRED TO BE SUBMITTED WITH ALL REVISED PLANS.

REVISION SCOPE OF WORK

<PROVIDE DETAILED SCOPE OF WORK FOR REVISION>

PROJECT DIRECTORY

ARCHITECT
BUSINESS NAME: _____
CONTACT NAME: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
PHONE: _____
EMAIL: _____

PROPERTY OWNER
BUSINESS NAME: _____
CONTACT NAME: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
PHONE: _____
EMAIL: _____

TENANT
BUSINESS NAME: _____
CONTACT NAME: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
PHONE: _____
EMAIL: _____

7	NO	DATE
6		
5		
4		
3		
2		
1		

DESIGNED:	OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)
DRAWN:	NO OCFA REVIEW REQUIRED
CHECKED:	PLAN REVIEW ONLY
DATE:	PLAN REVIEW AND INSPECTION
SCALE:	

PLANS PREPARED BY:	LICENSE NO. EXP. DATE
ARCHITECT:	

<PROJECT NAME>
<PROJECT ADDRESS>
ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
<INSERT SR #>
SHEET 1