



Page 1

COUNTY ADMINISTRATOR
BILL CLARK

COUNTY OF ORANGEBURG

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Commercial Hood and Suppression System Plan Review

Include: Orangeburg County
Resident State Fire Marshall's Office
P.O. Box Drawer 9000
Orangeburg, S.C. 29116
Phone 803-533-6173 Fax 803-533-6048

Name of business with kitchen hood _____

Contact _____ Phone # _____

Address _____ City/Town _____ Zip _____

Owners Name _____

Owners Mailing Address _____ City/Town _____

Zip _____ Number of Stories _____ Occupancy _____ Const. Type _____

Seismic Zone _____ Area(sq.ft.) _____ Occupant Load _____

Fuel Type-check one or more LP _____ Natural Gas _____ Electric _____ Solid Fuel _____

Fire System Installer _____ Phone# _____

Mailing address _____ City/Town _____ Zip _____

Is work new _____ or remodel _____ Value\$ _____

The applicable codes and standards are: 2006 International Fire, Building and Mechanical codes and the NFPA standards.

A. Fire suppression system information required:

- Is this work a fire suppression system upgrade only? Yes No The type of system - carbon dioxide wet chemical dry chemical or sprinkler
- A shop drawing showing the listing of the fire protection system (must be UL standard 300 compliant)
- A drawing of the room the cooking equipment is in showing, by scale or dimension, the size of the room, location of equipment and its size, manual pull locations (must be 10 ft. away from hood and towards an exit), fuel shut off solenoid or breaker location.
- Location and number of flow points (a computer generated schematic is acceptable) Arrangement and sizing calculations of suppression nozzles.
- Equipment and its listings to be used in conjunction with the fire protection such as the fuel shut off valve. Please indicate if the listing of the system requires the exhaust fan to continue to run on discharge. Yes No Listed either way

B. Hood, duct, ventilation, and owner items required: (Provide a drawing as needed)

- Type of hood – canopy/overhead, single or double island, eyebrow or back shelf. Listing # and agency _____
Are hood and exhaust fan an engineered system? Yes No Length of Hood(s) - _____
- Construction of the hood? Galvanized steel, stainless steel, other. Is hood 18 Ga. or MSG #20 ?
- Duct construction must be 16 Ga. steel minimum. Yes No
- Placement of cooking surfaces underneath hood, (appliances must be 6 inches back from vertical edge of canopy except at protected wall) See Illus. A - Yes No
- Hood height above cooking surfaces and from cooking surface to bottom edge of grease filters. _____” canopy to cooking surface, _____” cooking surface to filters. **See Illus. A**
- Type of grease extractors or filters. Mesh or baffle ?
- Exhaust and make up air equipment and capacities. In hood, mechanical or from room. CFM of make up air _____ CFM of exhaust fan _____
(note: make up air must equal or exceed exhaust air)
- If the bldg. has a fire alarm system the hood system must actuate it. Yes No
- Verify the fuel or electrical supply to the cooking equipment under the hood shut off on fire protection system actuation. (required) Yes No reset must be manual.
- Construction of walls surrounding cooking equipment within 18” must be fire rated non-combustible, please describe _____
- Construction of ceilings within 18” of hood top must be rated, please describe _____
- Does the duct work penetrate a wall or an attic space ?
- Hood shaft protection type if required (if the duct is within 18” to combustible construction). UL Blanket Wrap One Hour Enclosure
- Verify that no other building systems are venting into hood. Yes No What _____
- Provide the size and placement of a Type K fire extinguisher _____
- Show with a drawing the location of the roof or wall mounted exterior fan (fan must be listed for kitchen service, with **Illustration B** following). Yes No
- Clearance to combustible construction of roof/ceiling to duct/hood is provided. Yes No
See Illustration A.

Illustration A - Hood and duct requirements for clearances to combustible construction

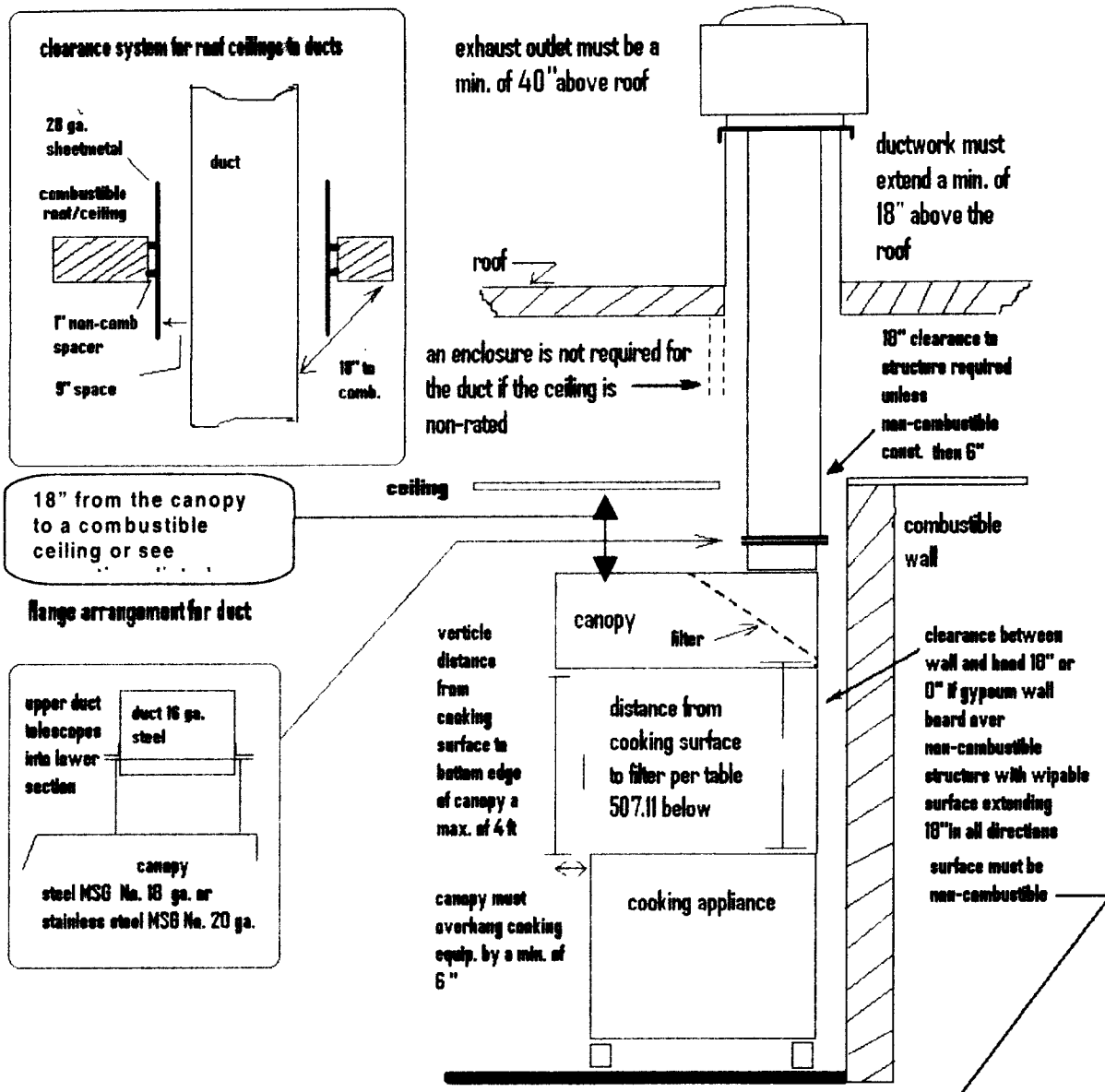
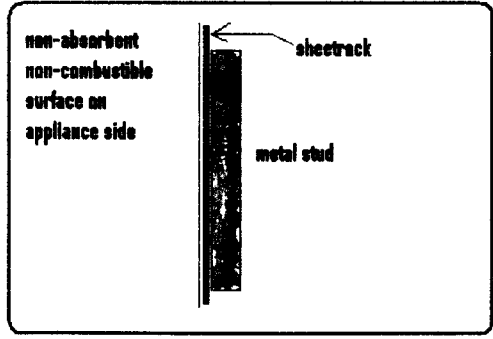


Table 507.11

type of cooking appliance	height above cooking surface
Without exposed flame	.5 ft.
Exposed flame and burners	2 ft
Exposed charcoal and charcoal types	3.5 ft



Exceptions:
 Zero (0) clearance for non-combustible ceilings per the International Mechanical Code (IMC) 507.9 and hoods that are listed to be against combustible ceilings or separated a listed distance. Clearances can also be reduced using Table 308 of the IMC.

ILLUSTRATION B

**Roof and Wall fan locations
for type I hood exhausts**

