KITCHEN HOOD SIZE: 32'-0"L x 4'-0"W
FACE AREA OF HOOD: 128 SQ. FT.
QUANTITY OF EXHAUST AIR AT HOOD: 12,800 CFM (100%) IBM
QUANTITY OF MAKE UP AIR HOOD: 10,880 CFM (85%) IBM
DUCT SIZE: (24" x 20") x 2 DUCTS
AIR VELOCITY IN DUCT: 1,920 FPM

TEPPAN-YAKI GRIDDLE HOOD (HOOD #1 ~ 2) SIZE: 6'-0"L x 4'-0"W
FACE AREA OF EACH HOOD: 24 SQ. FT.
SINCE THEY ARE CENTRAL ISLAND HOODS, SO QUANTITY OF EXHAUST AIR AT EACH HOOD: 3,000 CFM (100%)
QUANTITY OF EXHAUST AIR AT TWO HOODS: 6,000 CFM(100%)
QUANTITY OF TWO MAKE UP AIR HOODS: 5,100 CFM(85%)
DUCT SIZE: 18" x 24"
AIR VELOCITY IN DUCT: 2,000 FPM

TEPPAN-YAKI GRIDDLE HOOD (HOOD #3 ~ #6) SIZE: 5'-0"L x 4'-0"W
FACE AREA OF EACH HOOD: 20 SQ. FT.
SINCE THEY ARE CENTRAL ISLAND HOODS, SO QUANTITY OF EXHAUST AIR AT EACH HOOD: 2,500 CFM (100%)
QUANTITY OF EXHAUST AIR AT TWO HOODS: 5,000 CFM(100%)
QUANTITY OF TWO MAKE UP AIR HOODS: 4,250 CFM(100%)
DUCT SIZE: 16" x 24"
AIR VELOCITY IN DUCT: 1,875 FPM

HOOD VENTILATION SYSTEM NOTES:
1. Fire suppression system shall be installed by license of installer underneath the hood.
2. Contractor shall submit shop drawing and manufacturer's data before installation.
3. All wiring and electrical equipment shall comply with NFPA 70 the National Electrical Code.
4. Provide clean out at the base of each vertical riser that over 20", and horizontal duct every 12'.
5. Hood is fabricated as according to NFPA code 96. All seams, joints and penetrations are continuously welded as liquid tight and constructed with No. 18 ga. Stainless steel.
6. Ducts are constructed with 16 ga. metal iron and shall be welded as liquid tight.
7. Hood and duct shall have a mininum clearance of 18" from any combustible material.
8. The kitchen exhaust system shall be installed per State and local code and International Mechanical Code and manufacturer's specification.
9. Make up fan and Exhaust fans shall be electricaly interlocked, and provide one switch for both fans.

10. EXHAUST FAN:
EF-K1, EF-K2 FOR KITCHEN HOOD: DAYTON 7A711 (SUBJECT 762), 2 HP, WHEEL DIA. 24.5", 3 PHASE, 208V, 7,070 CFM, 0.50" SP AT 900 RPM.

EF-G1~EF-G5 FOR TWO TEPPAN-YAKI GRIDDLE HOODS: DAYTON 7A641 (SUBJECT 762), 1 HP, WHEEL DIA. 24.5", 1 PHASE, 115/230V, 6,245 CFM, 0.50" SP AT 820 RPM.

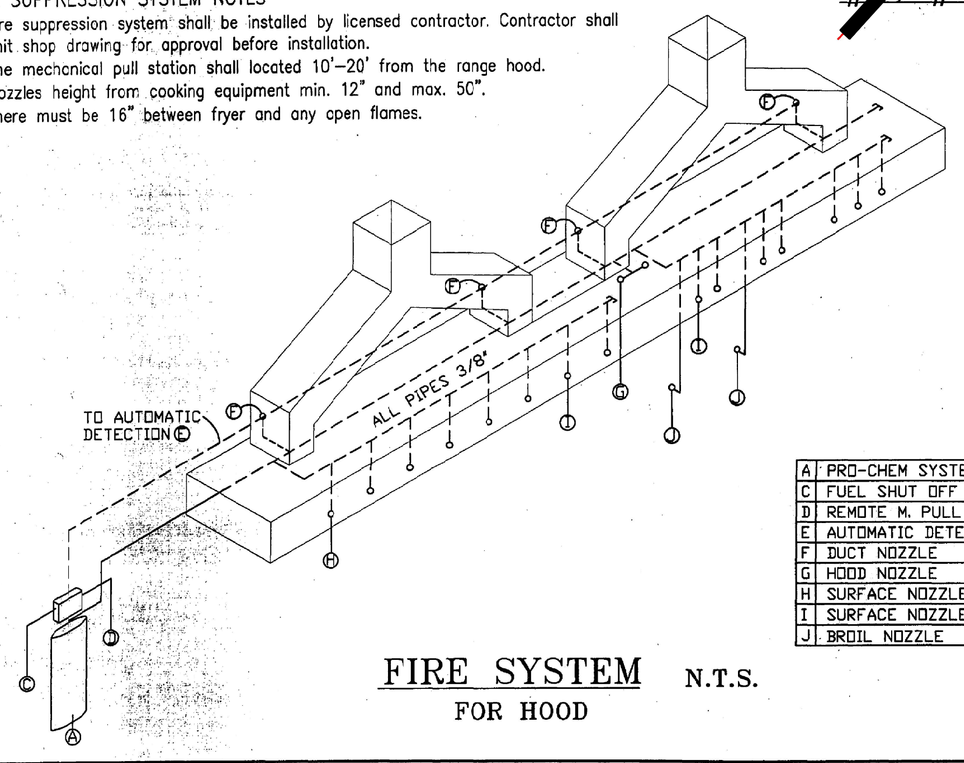
EF-G2~EF-G5, EACH ONE FOR TWO TEPPAN-YAKI GRIDDLE HOODS: DAYTON 7A636 (SUBJECT 762), 1.5 HP, WHEEL DIA. 24.5", 1 PHASE, 115/230V, 5,090 CFM, 0.250" SP AT 1,155 RPM.

11. MAKE UP AIR FAN:
SF-K1 FOR KITCHEN HOOD: DAYTON 7A677 (UL LIST), 5 HP, WHEEL DIA. 30", 3 PHASE, 208V, 11,640 CFM, 1.0" SP. FAN AT 890 RPM.

SF-G1 FOR TEPPAN-YAKI GRIDDLE HOOD: DAYTON 7A572 (UL LIST), 1.5 HP, WHEEL DIA. 20", 1 PHASE, 115/230V, 5,220 CFM, 0.50" SP. FAN AT 1,150 RPM.

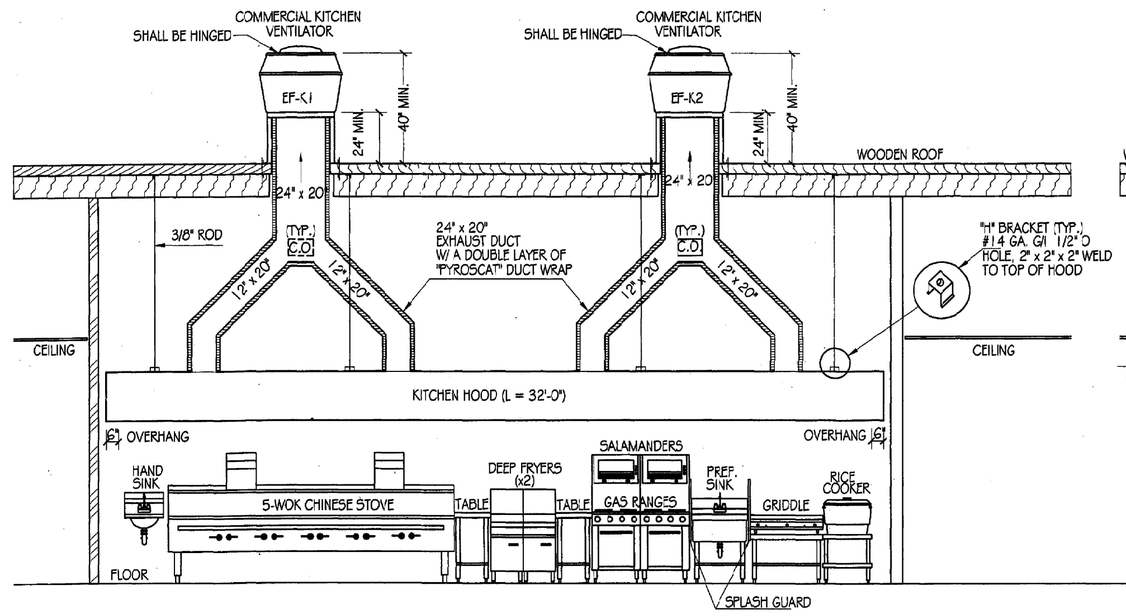
SF-G2~SF-G5 FOR TEPPAN-YAKI GRIDDLE HOOD: DAYTON 7A6[illegible] (UL LIST), 1 HP, WHEEL DIA. 20", 1 PHASE, 115/230V, 4,480 CFM, 0.250" SP. FAN AT 1,010 RPM.

FIRE SUPPRESSION SYSTEM NOTES
1. Fire suppression system shall be installed by licensed contractor. Contractor shall submit shop drawing for approval before installation.
2. The mechenical pull station shall located 10'-20' from the range hood.
3. Nozzles height from cooking equipment min. 12" and max. 50".
4. There must be 16" between fryer and any open flames.

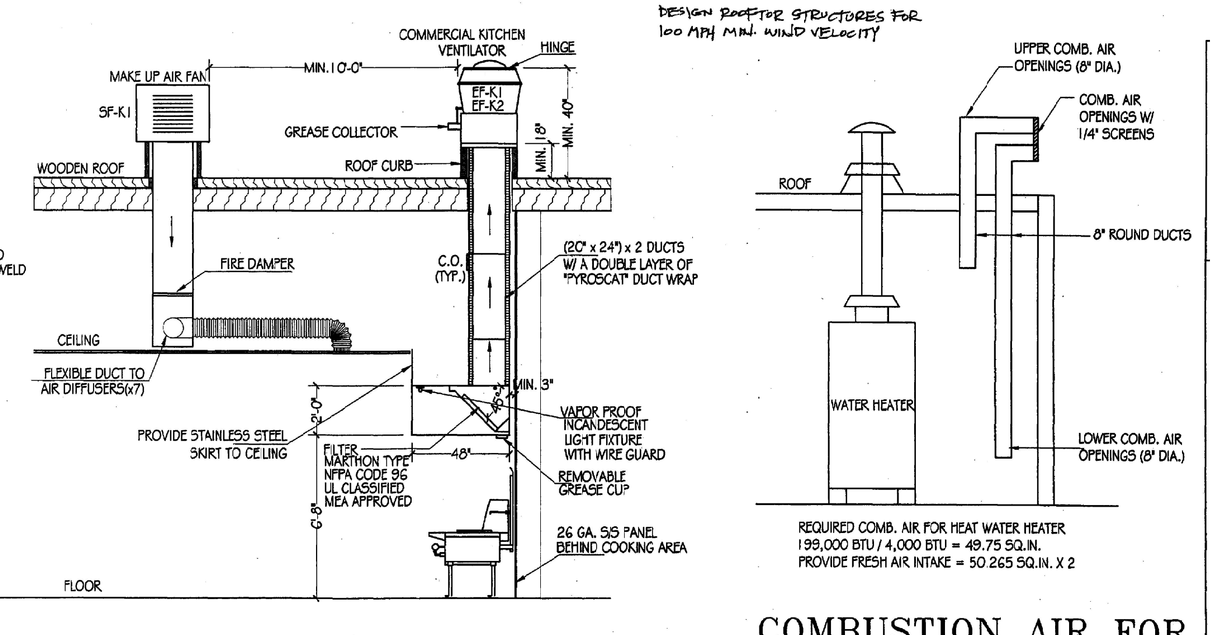



| | |
|---|---|
| A | PRO-CHEM SYSTEM |
| C | FUEL SHUT OFF |
| D | REMOTE M. PULL STATION |
| E | AUTOMATIC DETECTION 300 DEGREES |
| F | DUCT NOZZLE |
| G | HOOD NOZZLE |
| H | SURFACE NOZZLE |
| I | SURFACE NOZZLE |
| J | BROIL NOZZLE |

FIRE SYSTEM N.T.S.
FOR HOOD




KITCHEN HOOD FRONT VIEW N.T.S.



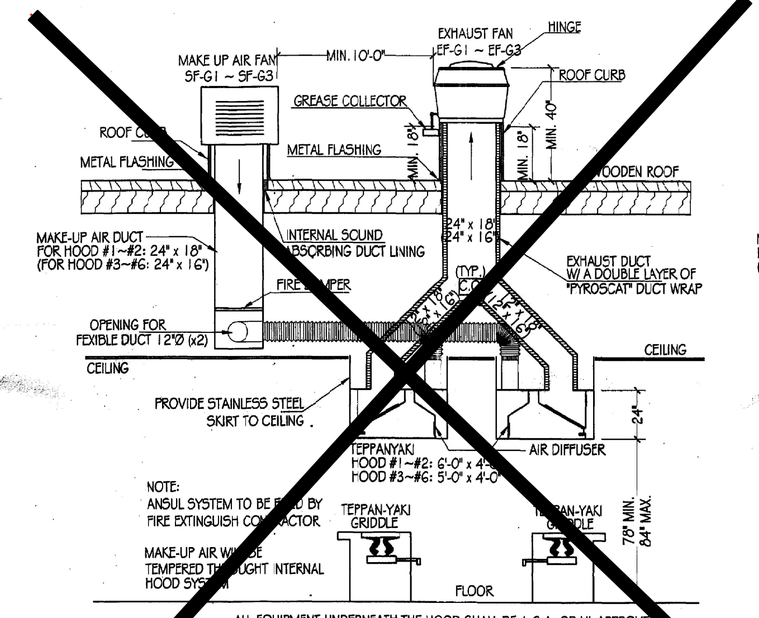

KITCHEN HOOD SIDE VIEW N.T.S.

DESIGN ROOFTOP STRUCTURES FOR 100 MPH MIN. WIND VELOCITY



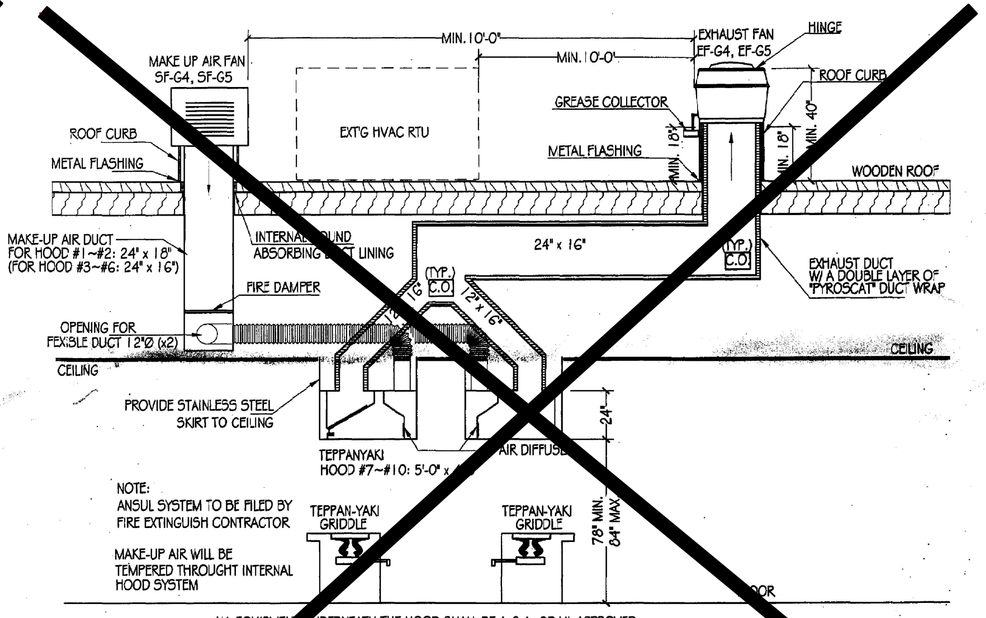

REQUIRED COMB. AIR FOR HEAT WATER HEATER
199,000 BTU / 4,000 BTU = 49.75 SQ.IN.
PROVIDE FRESH AIR INTAKE = 50 265 SQ.IN. X 2

COMBUSTION AIR FOR WATER HEATER ROOM



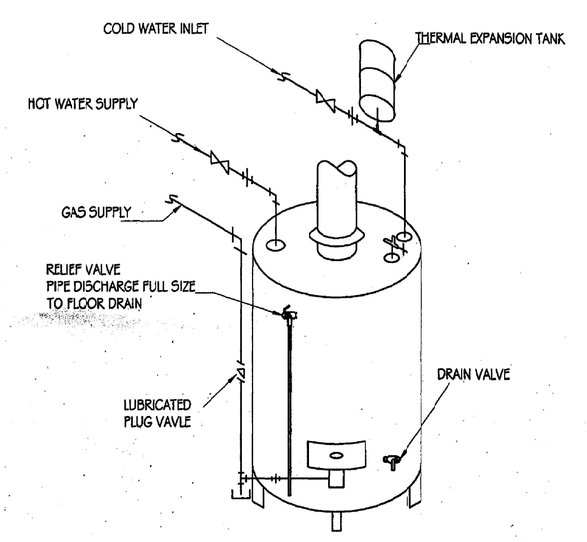

ALL EQUIPMENT UNDERNEATH THE HOOD SHALL BE A.G.A. OR UL APPROVED.

TEPPANYAKI HOOD #1, #2, (#3 ~ #6) SIDE VIEW N.T.S.




ALL EQUIPMENT UNDERNEATH THE HOOD SHALL BE A.G.A. OR UL APPROVED.

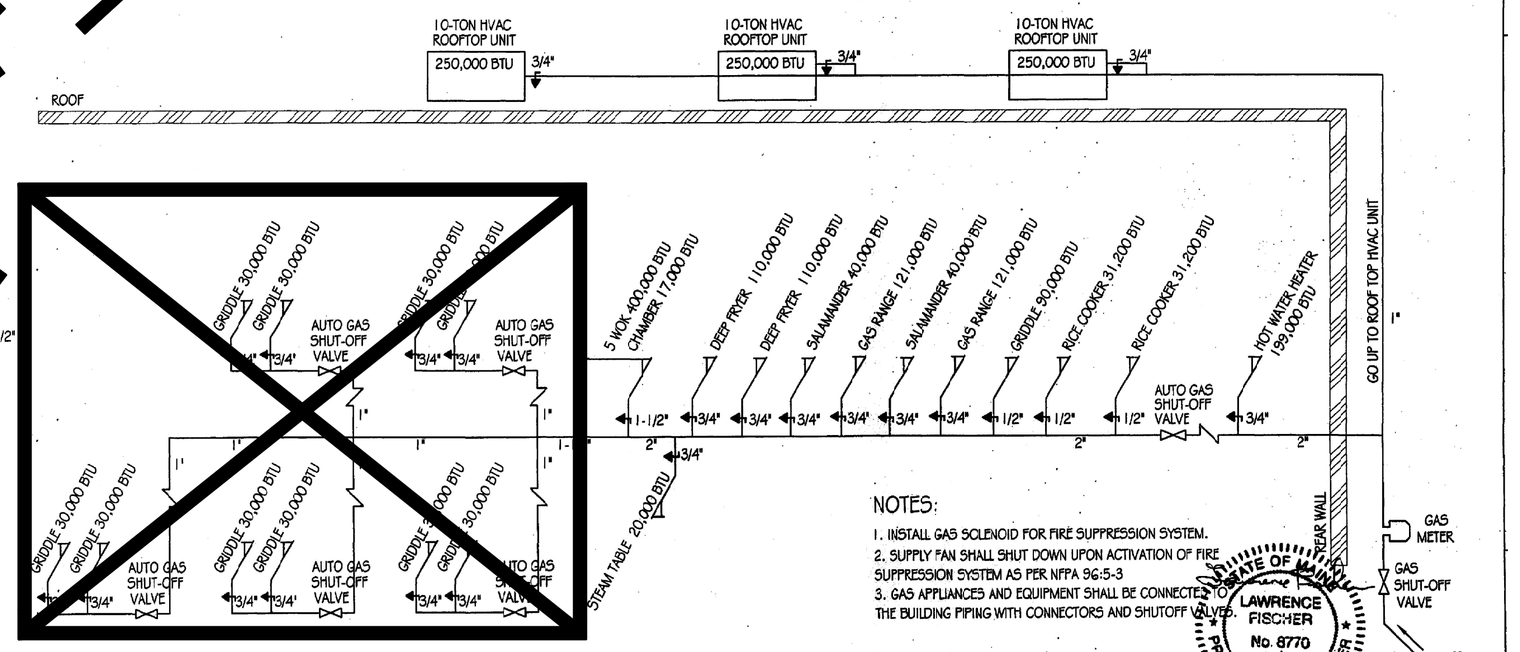
TEPPANYAKI HOOD #7 ~ #10 SIDE VIEW N.T.S.




WATER HEATER DETAIL N.T.S.

| GAS CALCULATION | | |
|---|---|---|
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| TEPPAN-YAKI GRIDDLE | 30,000 BTU | 3/4" |
| WOK | 80,000 BTU | 1-1/2" |
| WOK | 80,000 BTU | |
| WOK | 80,000 BTU | |
| WOK | 80,000 BTU | |
| WOK | 80,000 BTU | |
| CHAMBER | 17,000 BTU | |
| STEAM TABLE | 20,000 BTU | 3/4" |
| DEEP FRYER | 110,000 BTU | 3/4" |
| DEEP FRYER | 110,000 BTU | 3/4" |
| SALAMANDER | 40,000 BTU | 1/2" |
| GAS RANGE | 121,000 BTU | 3/4" |
| SALAMANDER | 40,000 BTU | 1/2" |
| GAS RANGE | 121,000 BTU | 3/4" |
| GRIDDLE | 90,000 BTU | 3/4" |
| RICE COOKER | 31,200 BTU | 1/2" |
| RICE COOKER | 31,200 BTU | 1/2" |
| WATER HEATER | 199,000 BTU | 3/4" |
| 10-TON HVAC UNIT | 250,000BTU | 3/4" |
| 10-TON HVAC UNIT | 250,000BTU | 3/4" |
| 10-TON HVAC UNIT | 250,000BTU | 3/4" |

TOTAL GAS CONSUMPTION = 2,380,400 BTU 2"




NOTES:
1. INSTALL GAS SOLENOID FOR FIRE SUPPRESSION SYSTEM.
2. SUPPLY FAN SHALL SHUT DOWN UPON ACTIVATION OF FIRE SUPPRESSION SYSTEM AS PER NFPA 96:5-3
3. GAS APPLIANCES AND EQUIPMENT SHALL BE CONNECTED TO THE BUILDING PIPING WITH CONNECTORS AND SHUTOFF VALVE.

GAS RISER DIAGRAM N.T.S.

STATE OF MAINE
LAWRENCE FISCHER
No. 8770
REGISTERED PROFESSIONAL ENGINEER

DATE: 03/25/08

KING'S ASSOCIATES INC.
84 CANAL STREET, NYC, NEW YORK 10002
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ARCHITECTS ENGINEER CONSULTANT CONTRACTOR

KON ASIAN BISTRO
1140 BRIGHTON AVENUE
PORTLAND, ME 04102

HOOD SECTION
GAS RISER DIAGRAM

DWG. NO. M2188203
A5
5 OF 6