EXAMPLE OF PRE-APPROVED PLANS. PLANS AVAILABLE FOR 498, 749, OR 1,190 SF. LAYOUTS IN THREE ARCHITECTURAL STYLES THROUGH THE CITY OF MERCED PRE-APPROVED ADU PROGRAM. CONTACT INSPECTION SERVICES DIVISION AT (209) 385-4773 OR INSPECTIONSERVICESWEB@CITYOFMERCED.ORG FOR MORE INFORMATION.

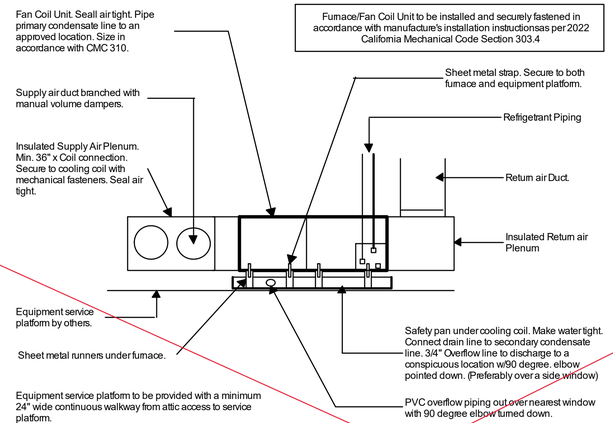
Fumace/Fan Coil Unit(s) installed in attic space shall be installed in accordance with manufacture's installation instuctions as per 2022 Califomia Mechanical Code Section 304.4

Minimum Attic Equipment Access Requirements

Heating and Cooling Equipment Schedule

Outdoor Heat Pump Unit

Mark	Mfgr	Model Number	Nom. Tons	Cooling MBH		Heating MBH		Electrical			WT LBS
				Total	Sens.	47degF	17degF	Volts/Ph	MCA	MOP	
HP-1	Carrier	GH5SAN424	2.0	23.6	18.4	23.6	14.4	208/230-1	18.2	30	171



Fan Coil Installation In Attic Detail

Exhaust Fan Schedule

Mark		Mfgr	Model Number	CFM Set Point	S.P. In W.G.	Sones	Electrical				Type	Duct Conn	Op. Wt. LBS
							Amps	Watts	Volts	Ph			
EF-1-	1	Panasonic	FV-0511VK2 w/FV-CSVK1 Condensation Sensor	50	0.1	<0.3	0.06	3.1	120	1	Ceiling	4"" Dia	12
					0.25	0.4	0.07	6.2					
	2			80	0.1	<0.3	0.06	5.1					
					0.25	0.5	0.10	9.6					
	3			110	0.1	<0.3	0.10	9.9					
					0.25	0.8	0.16	15.4					
EF-2-	1	Panasonic	FV-0511VK2 Fan Only	50	0.1	<0.3	0.08	3.1	120	1	Ceiling	4"" Dia	12
					0.25	0.4	0.07	6.2					
	2			80	0.1	<0.3	0.06	5.1					
					0.25	0.5	0.10	9.6					
	3			110	0.1	<0.3	0.10	9.9					
					0.25	0.8	0.16	15.4					
EF-3-	1	Panasonic	FV-1115VK2 Fan Only	110	0.1	<0.3	0.8	6.9	120	1	Ceiling	6" Dia	12
					0.25	0.3	0.13	12.8					
	2			130	0.1	<0.3	0.10	9.2					
					0.25	0.4	0.17	16.5					
	3			150	0.1	<0.3	0.16	12.9					
					0.25	0.7	0.22	22.0					

All Exhaust Fans are to be ENERGY STAR Compliant as per 2022 Califomia Green Code, Section 4.506.1 Mandatory Measure. Scheduled exhaust fan(s) are for reference only and can be substituted with "or equal".

Exhaust fan(s) serving bathrooms which contains a bathtub, shower or tub/shower combination are to be controlled by a Humidistat which shall be readily accessible as per 2022 Califomia Green Code, Section 4.506.1 Mandatory Measure.Humidistat shall be capable of adjustment between a relative humidity range of 50 to 80 percent.

Bathroom Exhaust fan(s) are to be on with either a light switch or motion sensor.

Exhaust fan(s) designated as the IAQ Ventilation Fan is to meet minimum requirements of exhaust rate @ .25: ESP and =< 1.0 Sone level. See Indoor Air Quality (IAQ) block Note.

Exhaust ducting is to be sized in accordance with Table 150.0-H (ASHRAE 62.2: Table 5-3) Prescptive Duct Sizing for Single Fan Exhaust Systems.

Ducts shall be securely connected, be supported and secured using approved staps. All joints are to be seal air tight. Exhaust fans are to be provided with back draft damper. Install an appropriate screened termination cap.

Table 150.0-H Prescriptive Ventilation System Duct Sizing [ASHRAE 62.2:Table 5-3]

Fan Airflow Rating, cfm at minimum static pressure [f] 0.25 in water cfm (L/s at minimum 62.5 Pa)	<=50 (25)	<=80 (40)	<=100 (50)	<=125 (60)	<=150 (70)	<=175 (85)	<=200 (95)	<=250 (120)	<=350 (165)	<=400 (190)	<=450 (210)	<=700 (330)	<=800 (380)
Minimum Duct Diameter, In. (mm)[b] For Rigid duct	4 [e] (100)	5 (125)	5 (125)	6 (150)	6 (150)	7 (180)	7 (180)	8 (205)	9 (230)	10 (255)	10 (255)	12 (305)	12 [d] (305)
Minimum Duct Diameter, In. (mm)[a,b] For Flex duct [c]	4 (100)	4 (125)	6 (150)	6 (150)	7 (150)	7 (180)	8 (205)	8 (205)	9 (230)	10 (255)	NP	NP	NP

Footnotes for Table 150.0-H

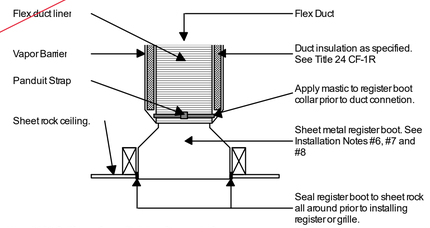
a. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
b. NP = application of the prescriptive table is not permitted for this scenario.
c. Use of this table for ventilation of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct diameter ratio of 1.0.
d. For this scenario, use of elbows is not permitted.
e. For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm).
f. When a vented range hood utilizes a capture efficiency rating to demonstarte compliance with 150.0(o)1 Giiib, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for detemining compliance.

Air Balance Schedule

House Facing CFM Distribution Schedule

Room Name	North Cool	East Cool	South Cool	West Cool	Max	Min	Average
Ground Floor							
Living	253	228	240	235	253	228	**239**
Kitchen	199	185	203	188	203	185	**194**
Flex	202	247	206	209	247	202	**216**
Bath	27	24	28	25	28	24	**26**
Dressing	25	22	25	25	29	22	**25**
Bed 1	94	94	98	114	114	94	**100**
Total CFM	800	800	800	800	874	755	**800**

Air Balancing Notes: 1) CFM delivery allocations is based upon ACCA Manual J room-by-room heat gain/heat loss calculations. 2) CFM distribution noted on plans represent the orientation as noted. 3) Air Balance to within +/- 15% of stated air flow. 4) Depending upon homeowner lifestyle and space usage, air balancing requirements may vary. 5) After air balancing to the above, it is the homeowners responsibility to fine tune air flows to individual requirements.



Note: 2022 California Green Building Standards Code, Section 4.504.1 Mandatory Measure requires that at time of rough installation, all duct and other related air distribution component openings shall be covered.

Register Boot Installation

Register and Grille Schedule

Mark	Mfgr	Model	Service	Type	Pattern	Size	CFM
CS2	Shoemaker	202	Supply	Ceiling	2-Way	As Noted	As Noted
CS3	Shoemaker	203	Supply	Ceiling	3-Way	As Noted	As Noted
CS4	Shoemaker	204	Supply	Ceiling	4-Way	As Noted	As Noted
SW	Shoemaker	950	Supply	Sidewall	Spread	As Noted	As Noted
FGR	Shoemaker	935FG2	Retum	Ceiling/Sidewall	Bar Faced	As Noted	-
CR/CTG	Shoemaker	1050	Retum	Ceiling/Sidewall	-	As Noted	-

Scheduled regilers and grilles are for reference only and can be substituted with "or equal".

CITY OF MERCED ACCESSORY DWELLING UNIT PROGRAM

749

No.	DESCRIPTION	DATE

Project Number 2210.2

M.02

HEATING, VENTILATION and AIR CONDTIONING

last revision 01/*30/2023

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