

MECHANICAL VENTILATION AND REHEAT

CEC-MECH-3C (Revised 08/09)



MECHANICAL VENTILATION AND REHEAT												MECH-3C	
PROJECT NAME										DATE			
MECHANICAL VENTILATION §121(b)2								REHEAT LIMITATION §144(d)					
AREA BASIS			OCCUPANCY BASIS			VAV Minimum							
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Zone/ System	Condition Area (ft ²)	CFM per ft ²	Min CFM by Area B x C	Num of People	CFM per Person	Min CFM by Occupant E x F	REQ'D V.A. Max of D or G	Design Ventilation Air cfm	50% of Design Zone Supply cfm	B x 0.4 cfm/ft ²	Max of Columns H, J, K, 300 cfm	Design minimum Air setpoint	Transfer Air
					15								
					15								
					15								
					15								
					15								
					15								
					15								
					15								
					15								
					15								
					15								
					15								
Totals									Column I Total Design Ventilation Air				
C	<i>Minimum ventilation rate per Section §121, Table 121-A.</i>												
E	<i>Based on fixed seat or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating.</i>												
H	<i>Required Ventilation Air (REQ'D V.A.) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column D or G).</i>												
I	<i>Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference.</i>												
J	<i>Design fan supply cfm (Fan CFM) x 50%; or the design zone outdoor airflow rate per §121.</i>												
K	<i>Condition area (ft²) x 0.4 cfm/ft²; or</i>												
L	<i>Maximum of Columns H, J, K, or 300 cfm</i>												
M	<i>This must be less than or equal to Column L and greater than or equal to the sum of Columns H plus N.</i>												
N	<i>Transfer Air must be provided where the Required Ventilation Air (Column H) is greater than the Design Minimum Air (Column M). Where required, transfer air must be greater than or equal to the difference between the Required Ventilation Air (Column H) and the Design Minimum Air (Column M), Column H minus M.</i>												