

	CITY OF MILPITAS Office of Building Safety 455 E. Calaveras Blvd. Milpitas, CA 95035 408-586-3240 www.milpitas.gov	Policy:	BDP-ME05
		Effective Date:	5/9/2013
		Proposed by:	RQ
		Last Reviewed/ Revised:	3/10/2023
		Reviewed/ Revised by:	JDS
		Approved By:	Building Official
MECHANICAL VENTILATION THROUGH INFILTRATION			

References:

2022 CEnC 150.0(o), 162.2(b)2
 ASHRAE Standard 62.2-2019

Background:

Mechanical contractors and engineers have proposed the use of exhaust only fans in multifamily buildings as a means of mechanical ventilation to provide fresh natural air into residential dwelling units when natural ventilation is not provided. The claim is that a continuously running or intermittently running exhaust fan is allowed because it brings in natural air through infiltration of the building envelope, specifically the exterior wall. The proposal has no method to supply fresh air through a supply duct or opening to the exterior. This system solely relies on the use of infiltration.

Our position on this type of system is that the exhaust only fan will pull air from all areas including corridors, other dwelling units and the exterior through infiltration. This is in direct violation of the California Energy Code (CEnC) and ASHRAE 62.2 as stated below.

Findings:

For both single-family and multifamily residential buildings, CEnC sections 150.0(o) and 162.2(b)2, respectively, require that for ventilation and indoor air quality, dwelling units meet the requirements of ASHRAE Standard 62.2.

ASHRAE Standard 62.2 Section 6.1 states, in part:

“Measures shall be taken to minimize air movement across the dwelling-unit boundary from adjacent spaces, such as garages, unconditioned crawlspaces, unconditioned attics, and other dwelling units. [...] Supply and balanced mechanical ventilation mechanical ventilation systems shall be designed and constructed to provide ventilation air directly from the outdoors.”

Policy:

Based on our research and findings above, the City of Milpitas does not allow the use of exhaust only fans to achieve the fresh outside air requirement through infiltration.