

**DOCKETED**

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*Comment Received From: Daikin Applied  
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**Fan Power**

*Additional submitted attachment is included below.*

These comments are submitted by Daikin Applied in response to California's proposed changes to fan power regulation. Daikin Applied is headquartered in Plymouth, Minnesota, manufactures commercial HVAC equipment, employs over 9,000 people, and is a division of Daikin Industries.

- Following up on previous comments on the proposed fan power budget;
  - ASHRAE 90.1 basically restricts multiple zone VAV fan systems to 1.3 BHP per K-CFM. The proposed KW per K-CFM requirements are more restrictive and will be a problem on most existing packaged rooftops with design airflow approaching 40,000 CFM or larger especially with return fans.
  - Return fans are an important option on multiple floor or other ducted return applications and provide better building pressure and minimum ventilation control than exhaust fans.
  - Rooftops must ship on flat beds, so they are space constrained, and 40,000 CFM return fans with 65% efficiency generally do not fit.
  - High capacity furnaces deserve more than 0.2" air pressure drop and are needed on applications requiring a relatively larger percentage of ventilation air and some process applications.
  - The newest version helps, because allowed furnace air pressure drop increased in certain sizes, and the SAF is allowed to offset the RAF, but compliance is still a problem for many existing units. Perhaps extra air pressure drop can at least be allowed on buildings taller than 3-4 stories.
  - I can provide data on the above comments if needed.

Thank you for considering Daikin Applied comments. Please contact me if you have any questions.

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