

FAQ:

What new application documents are required for a Permit to install or replace a commercial kitchen exhaust hood based on the 2021 IECC and IMC?

Background:

The code requirements for commercial kitchen exhaust hoods now reside in two separate areas of the adopted IECC and IMC. See IMC 507 and 508 AND IECC C403.7.5. This is because certain requirements pertain to energy consumption while others relate to fire safety.

- From the energy consumption standpoint, the act of exhausting high-temperature grease laden air while simultaneously injecting tempered make-up air into such exhaust air stream results in inefficient energy use and can create uncomfortable working conditions adjacent to the kitchen hoods.
- From the fire safety standpoint, efficient air flow that promotes safe and effective exhaust of grease laden air significantly reduces the risk of a fire. For these reasons, the new 2021 IMC and IECC require additional submittal documents for all Applications for Mechanical Permits relating to commercial kitchen hood installation.

The following information must be coordinated between the Commercial kitchen hood installer/designer and the Design Professional in Responsible Charge (DPRC) of the general HVAC design.

Answer:

In addition to the standard submission documents required for any [Application for Mechanical Permit](#), applications relating to commercial kitchen hood installation shall include all of the following:

1. Product listing confirming UL 710 listing of the commercial kitchen hood, if a listed hood is proposed, per IMC 507.1:
 - a. In accordance with IECC C403.7.5, where the total kitchen hood exhaust airflow exceeds 5000 cfm (2360 L/s), each hood is required to be a listed UL 710 hood unless exempt.
2. Information on the construction documents confirming compliance with all applicable provisions of IMC 507. For more information please review the Department's [plan submission standards](#), and
3. For projects involving new installation or relocation of a commercial kitchen hood:
 - a. An air balance diagram or schedule of the commercial kitchen hood and kitchen space/facility confirming that:
 - i. Makeup air delivered into the hood cavity does not exceed 10% of the exhaust rate per IECC C403.7.5, and
 - ii. To account for the other 90% of makeup air, total building design outdoor airflow balance information confirming total replacement airflow into the general vicinity of the commercial kitchen hood from the rest of the HVAC system per IMC 508.1.2

Questions? Call 311 or (215) 686-8686 (if outside Philadelphia) or submit an online form via <http://www.phila.gov/li/get-help>.

Disclaimer: This interpretation, policy or code application is intended to provide guidance to staff for consistency of review and is subject to change without notice. Application of this interpretation, policy or code application to specific projects may vary. There may be other ways to comply with the Code. If so, you are not required to use this method. You may want to investigate other options or consult with a professional identifying an equally code compliant solution.