# THE BAKER COMPANY

**Official Baker Position**

## The Baker Company and NSF International* Recommend Canopy Exhaust Connections (CEC) for Class II Type A1 and A2 Biological Safety Cabinets Connected to Building Exhaust Systems

**Point 1:** Installation and use of a Hard Exhaust Connection (HEC) on a Class II Type A1 or A2 bio-safety cabinet is NOT recommended by The Baker Company or NSF International*.

* -- excerpt from NSF Standard 49 (NSF/ANSI 49-2002).
***"The recommended exhaust system connection for Type A1 and A2 cabinets is an exhaust canopy connection. No Type A cabinet should ever be hard connected to an exhaust. A properly installed exhaust canopy will allow a Type A1 or A2 cabinet to maintain acceptable inflow velocity at the front access opening even when the flow through the exhaust canopy is completely stopped."***

**Point 2:** When customers exhaust air from Class II Type A1 or A2 Biological Safety Cabinets to the outdoors via ductwork, The Baker Company recommends a properly designed and tested Canopy Exhaust Connection (CEC). A CEC will allow the cabinet to maintain a safe and acceptable inflow velocity during a building exhaust system failure or flow variance. This insures containment (personnel protection) at the front access opening.

**Point 3:** The Baker Company also recommends a comprehensive risk assessment that includes the potential use of an air flow monitoring system with audible and visual alarms to indicate a failure of the exhaust system. An exhaust system failure will cause the canopy connected cabinet to exhaust to the room. The risk of this occurrence should be assessed by a properly trained safety professional to determine the need for an exhaust air flow monitoring and alarm system.

**Point 4:** When a biological safety cabinet is certified, the cabinet's CEC should also be tested for acceptable exhaust flow through the canopy openings in accordance with Baker's specification (found in the operator's manual).

**Point 5:** If an HEC is the only available option for a Class II Type A1 or A2 bio-safety cabinet installation, an air flow monitoring and alarm system should be installed to insure personnel protection. Air flow monitoring and alarm systems alert the cabinet users to exhaust system malfunctions.

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