

BSCs with Canopy or Thimble Connections

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Biological Safety Cabinets (BSCs) are used to provide personnel, environmental and product protection as long as appropriate practices and procedures are followed.

Work involving limited amounts of volatile or toxic chemicals and/or their associated fumes should only utilize a Class II Type A1 or A2 BSC connected to the building exhaust system via a canopy or “thimble” connection or a Class II Type B1 or B2 BSC which is exhausted from the building either via direct hard duct.

Current NSF/ANSI 49 Standards dictate Class II Type A1 or A2 cabinets with canopy connections must be fitted with an audible and visible exhaust alarm to indicate when air flow is being returned to the room rather than being exhausted out. This requirement was added to the standard in 2010 to enhance the safety of the user. Unfortunately, this means there currently exist older models in use which are not fitted with these alarms.

While certifiers of older BSCs may continue to certify units according to the version of the NSF/ANSI Standard 49 that was in place when the unit was manufactured, this will be noted on the certification report but may not ensure best practices, depending on the use of the unit. It is encouraged that older units in which limited amounts of volatile or toxic materials are manipulated and/or their associated fumes produced be retrofitted with exhaust alarms.

If you have an older model canopy or thimble connected unit which is not fitted with an exhaust alarm, our department can offer assistance by coming to your location to inspect the cabinet and provide a risk assessment to determine whether or not an alarm is advisable based on your current use of the cabinet.