



* Alternatives should be reviewed with the user and environmental health and safety. Certain processes require specialized containment such as perchloric and radioisotope hoods.

** Calculations were made using Lawrence Berkley National Labs, Fume Hood Calculator: <http://fumehoodcalculator.lbl.gov> (location: Boston).

*** VAV and Low Flow: Which Strategies Save More? 2007 Labs21 presentation by Victor Neuman.

REDUCE NUMBER OF HOODS:
(AND OR SIZE)

The larger the hood, the more cfm it uses. Right sizing a hood based on its use is one way to save energy. Below is an example using a 4' fume hood in lieu of a 6' hood.

Standard Fume Hood**
Location: Boston
(100 FPM, 18" opening)

HOOD WIDTH	CFM
48" (38" OPG)	475
72" (62" OPG)	775
	300 CFM SAVINGS
	\$1,178 PER YEAR

HIGH PERFORMANCE HOODS:

High performance hoods use a variety of airflow optimization features to achieve chemical containment within the hood using airflows as low as 50 FPM with an 18" sash opening.

6' Fume Hood, 18" sash opening**

FACE VELOCITY	COST / YEAR
100 FPM	\$3,043
60 FPM	\$1,826
	\$1,217 SAVINGS

DUCTLESS FUME HOODS:

This option is for predicatable process and chemical usage (however, not accepted by most EH&S yet). A process needs to be in place for replacement and disposal of carbon filters.