

- :

## ASHRAE 110

:  
fgolbabaei@sina.tums.ac.ir:

/ / : // :

SF6 ( )

( )

ASHRAE 110-95

% / ( fpm)

.( $p= /$  )

( % / )

(% / )

(% / )

.( $p= /$  )

% / ( / ppm) ASHRAE 110

( )

:

: (

Airflow

TA5

11.3.2008

(ASHRAE

)

.( Hitching and Mapin 1998)

ft<sup>2</sup> ( mm × mm)

.(Mamie et al. 1999)

.( Hitching and Maupin 1997)

: (

kpa ( psi )

ASHRAE110

( ) ( mm)  
 ± ( ± mm)  
 ± ( ± mm)

/ ppm )  
 ) ( )  
 ( ) (p = / ) ( )  
 ( )

SF6

MIRAN 1BX

FOXBORO

% / fpm / - ppm  
 % / (p = / ) ASHRAE 110

T-test

ASHRAE 110 / ppm  
 (p = / )  
 ( ) % /

: (

fpm

( ) (p = / )  
 ( fpm) % /  
 ( / ppm)

Hitching Smith : (

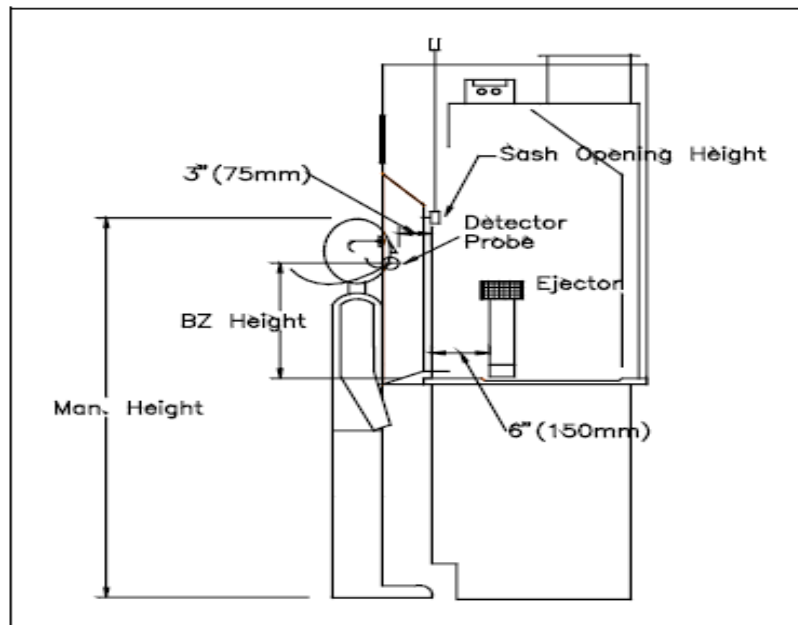
Smith 1999; )

( Hitching and Maupin 1997

Hitching

.(Fahim 2006)

.(Pamela et al.1999)



/...

---

---

80 fpm			(fpm)		
t	df	p			
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/

---



Pamela, L., Greenley, L. and Diberadisis J.,1999. Member of ASHRAE1999 "Containment Testing for Occupied and Unoccupied Hoods".

Smith, T., 1999. Use of average face velocity as an indicator of laboratory hood performance. American Hygiene conference and Expo Abstracts. pp. 174.

performance of laboratory fume hood as a Diagnostic Tool “, AIHA Jornal 59 : 133 – 138 , 1998.

Memarzadeh, F., 1996. Methodogy for optimization of laboratory hood containment. National institutes Of Health Bethesda , Maryland.