

Standard Operating Procedure Biohazard Class II Cabinet Inflow Velocity	SOP No. 8.048
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Page No.: 1 of 3

1 Purpose

- 1.1 To establish a standard procedure for measuring the work access opening inflow velocity and to calculate the exhaust airflow volume rate of Class II Biohazard Cabinets.

2 Scope

- 2.1 This procedure applies to Class II Biohazard Cabinets.

3 References

- 3.1 NSF Standard 49, 2002.
- 3.2 The Catalog of NSF Listings of Certified Biohazard Cabinetry which contains the Biohazard Cabinet to be tested.
- 3.3 www.nsf.org (world wide web)
- 3.4 The label affixed to the Biohazard Cabinet at the Manufacturing Facility

4 Definition

- 4.1 FPM: Feet Per Minute
- 4.2 CFM: Cubic Feet per Minute

5 Responsibility

- 5.1 Test and Balance (TAB) technicians shall record all test measurements on Form FN 8.057.2 (Biohazard Safety Cabinet Test Report Details I) in Inflow Velocity Test section and indicate test result, Pass or Fail, on Form FN 8.057.1 (Biohazard Safety Cabinet Test Report Summary Sheet).
- 5.2 All test reports shall be saved in files, located in the TAB department of Therma.
- 5.3 All test equipment utilized shall be in calibration in accordance with National Environmental Balancing Bureau (NEBB) Standards and traceable to the National Institute of Standards and Technology (NIST).

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Revision No.	SOP No.	Page
1	8.048	2 of 3

6 Materials Requirement

6.1 Material for sealing direct airflow reading instrument to Biohazard Cabinet work access opening without leakage (i.e. gasket material, cardboard, duct tape, etc).

6.2 Ringstand and Clamp

7 Test Equipment

The following devices may be used to execute the inflow velocity testing:

7.1 Therma anemometer with an accuracy of ± 3 FPM or 3% of the indicated velocity, whichever is larger.

7.2 Direct inflow measurement (DIM) instrument with an accuracy of ± 5 CFM or 3% of the indicated measurement, whichever is larger or in accordance with Annex B.

7.3 Pilot tube constructed according to the dimensions given in Industrial Ventilation. A manual of recommended practice along with the ringstand and clamp from 6.2.

8 Procedures

8.1 Refer to NSF 49, Annex F, Section F.3, Subsection F.3.3 for procedures and Subsection F.3.4 for standards of acceptance.

8.2 Record measurements on the Form FN 8.057.2 (Biological Safety Cabinet Test Report Detail I) in the Inflow Velocity Test section.

9 Review and Approval

9.1 TAB technicians shall return the Form FN 8.057.1 (Biohazard Safety Cabinet Test Report Summary Sheet) and the Form FN 8.057.2 (Biohazard Cabinet Report Detail I) to the TAB Department for review.

Revision No.	SOP No.	Page
1	8.048	3 of 3

Document Approval

Ron Simens

TAB Supervisor

6/25/03

Date

M. B. G.

Engineering Manager

7-2-03

Date

D. Lee

Quality Assurance Manager

7-2-03

Date

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