Discipline / Function			FHT Required Instrumentation (Effective January 1, 2025)																			Notes	Calibration Requirements
			RANGE					ACCURACY							RESOLUTION								
Air	FHT Air Velocity		25	fpm	to	2500	fpm	±	3%	of reading	±	3	fpm		1	fpm							12 Months
			0.10	m/s	to	12.7	m/s	±	3%	of reading	±	0.02	m/s		0.01	m/s							
FHT Instruments	Tracer Gas Detector		Minimum detection range: 0.01 PPM Minimum response time: 1 second The units shall be configured to measure sulfur hexafluoride (SF6), or other approved tracer gas, and display in concentration measurement units (PPM)					±	10%	of reading	or	0.025	ppm		0.01	ppm							12 Months
								whichever is greater															
	Detection Calibrator		Device used to calibrate the detection instrument in accordance with the manufacturer's specifications.					Not Applicable							Not Applicable								12 Months When Required
	Local Challenge Source		Device that can generate a small relatively neutrally buoyant smoke, discharging with minimal velocity.					Not Applicable							Not Applicable								Not Required
	Large Challenge Source		Device that can generate a large relatively neutrally buoyant smoke, discharging with minimal velocity.					Not Applicable							Not Applicable								Not Required
	Ejector w/critical orifice		Shall conform to the requirements as indicated in the current edition of NEBB FHT PS. See appendix D for instrument specifications					Not Applicable							Not Applicable								Not Required
	Orifice Calibrator	Flow Meter	0	l/m	to	10	l/m	±	3%						0.1	l/m						*2	Calibrate to appropriate tracer gas
		Mechanical Device	0	l/m	to	15	l/m	±	0.1	l/m					0.1	l/m							12 Months
	Tracer Gas		Sulfur Hexafluoride Commercial grade (Minimum purity of 99%) or approved replacement gas					Not Applicable							Not Applicable								SDS Required
	Mannequin		A three dimensional mannequin (torso) with arms and shall be of reasonable human proportions and be clothed with a lab coat. The height must be adjustable to meet the height requirements of the various hood configurations; i.e. standard bench hood, ADA height, floor mounted, etc. Probe shall be placed in the normal breathing zone based on the various heights.												Not Applicable								Not Required

NOTES

*1 CPT Option - choose only Option 1 OR Option 2 - along with required instrument for CPT certification (All instruments in any of the chosen is required)

*2 FHT Orifice Calibrator - Choose only one.

*3 Refer to Appendix A for complete instrumentation requirements for Sound Measurement (SM)

*4 Firms may own or rent vibration equipment instrumentation for vibration certification

*5 Calibration Requirement: Data logger calibration may be verified from a calibrated instrument with an associated calibration form showing calibration readings from both the calibrated instrument and the data logger. If a data logger is out of calibration and cannot be adjusted, the logger must be sent back to the factory for re-calibration or be replaced

*6 Accuracy of an instrument is either stated as a percentage of full scale or as a percentage of the reading. NEBB has chosen percentage of reading due to it being a more accurate reading. Since a % of reading error becomes smaller as you read near the lowest part of the scale the instrument resolution and accuracy must be very small to maintain the accuracy of the reading. To overcome this the manufactures add a standard offset to the % of reading to maintain a reasonable accuracy at all locations on the scale. Normally for TAB readings we are never operating at the extreme ends of the scale so this has no impact on our work.

*7 Calibrated per Industry/Manufacturer standards.

*8 Firms may own or rent Temp Documentation Thermal Camera for RCx. BET Temp Documentation Thermal Camera must be owned.

*9 Sound level meters with vibration integrators are *NOT* acceptable for NEBB approved instrumentation for making vibration measurements. That is, 1/3 octave or full octave vibration readings are not sufficient for NEBB Sound and Vibration work.

*10 Vibration meters, which ONLY acquire and display the overall vibration level, displacement, velocity, and/or acceleration DO NOT meet NEBB minimum requirements for Vibration instrumentation. These types of meters may only be used if the contract documents specifically allow for their usage.

General Note: Some local jurisdictions require qualified electrician for any electrical readings

Calibration Requirement: Instruments require a 3-point calibration, traceable to National Institute of Standards and Technology (NIST) or National Metrology Institute (NMI) unless otherwise noted.