

Discipline Function		FHT Required Instrumentation (Effective January 1, 2021)														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	
	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	Not Required
		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 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 a combination of both of the values. Instruments are rated as a percentage of reading with an added offset. The offset is added, with percentage of reading, because if the percentage of reading was used on a low value such as 1.0 the instrument would need to be very precise. When an offset is added over the measured range, a more achievable specification is produced for lower measured values. In some instruments the offset is nominated in counts, this is so the specified offset varies as the instrument range is adjusted.

**General Note:
Calibration Requirement:**

Some local jurisdictions require qualified electrician for any electrical readings
Instruments require NIST Traceable calibration or National Metrology Institutes (NMI) which exist in many countries maintaining primary measurements of standards; such as NPL in the UK, PTB in Germany and many others which are approved for those regions.