



GENERAL CLASSROOM INFORMATION

- 1. Room plan shape: Rectangular
 Non-Rectangular

- 2. Ceiling plane orientation: Flat
 Inclined
 Combination

- 3. Room length _____ (ft)
- 4. Room width _____ (ft)
- 5. Ceiling height (average) _____ (ft)

- 6. Estimate the percent coverage of the ceiling finishes:

_____ % Acoustical panels	_____ % Exposed structure
_____ % Painted gypsum board	_____ % Other
_____ % Gypsum board	

- 7. Estimate the percent coverage of the flooring finishes:

_____ % Carpet
_____ % Resilient flooring
_____ % Other

- 8. Estimate the percent coverage of any acoustical wall treatments:

_____ % Fabric covered panel
_____ % Cork board
_____ % Other

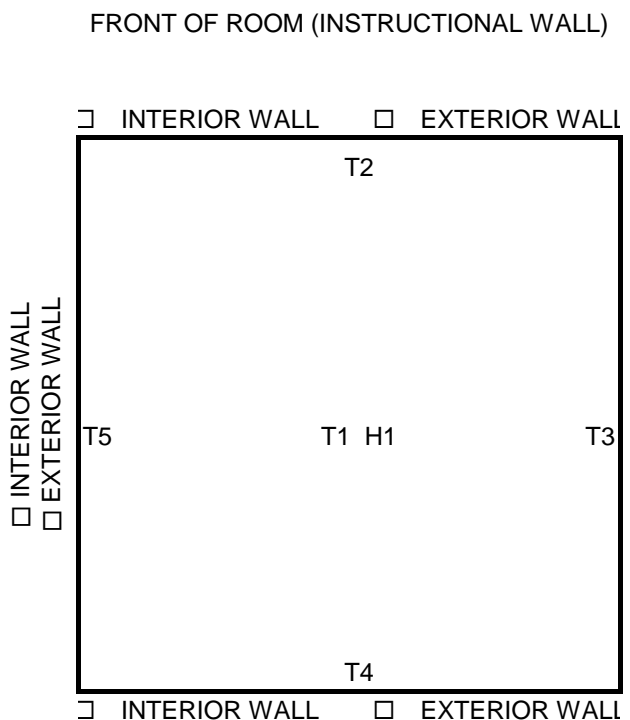
Classroom Observations:



THERMAL COMFORT CLASSROOM INFORMATION

OCCUPIED RECORDED TEMPERATURE AND HUMIDITY DATA				
	TIME OF DAY			
	EARLY AM <small>Complete before 10 AM</small> TIME:	LATE AM <small>Complete before 12 PM</small> TIME:	EARLY PM <small>Complete before 2 PM</small> TIME:	LATE PM <small>Complete after 2:30 PM</small> TIME:
MEASUREMENT LOCATION				
H1: RELATIVE HUMIDITY %				
T1: TEMPERATURE MIDDLE OF ROOM				
T2: TEMPERATURE FRONT OF ROOM				
T3: TEMPERATURE ROOM SIDE				
T4: TEMPERATURE REAR OF ROOM				
T5: TEMPERATURE ROOM SIDE				

NOTE: Measurements for three (of four) times of day are required
Mark on the diagram the location of the interior and exterior walls.



HVAC INFORMATION

What is the occupied heating setpoint? _____

What is the unoccupied heating setpoint? _____

What is the occupied cooling setpoint? _____

What is the unoccupied cooling setpoint? _____

What is the principal HVAC type?

- Single Zone Fan Coil Units
- Multi Zone Unit Ventilators
- Dual Duct Packaged AC
- VAV Steam/Hot
- Reheat Water/Convactor
- Central AHU with VAV Economizer
- Natural Ventilation

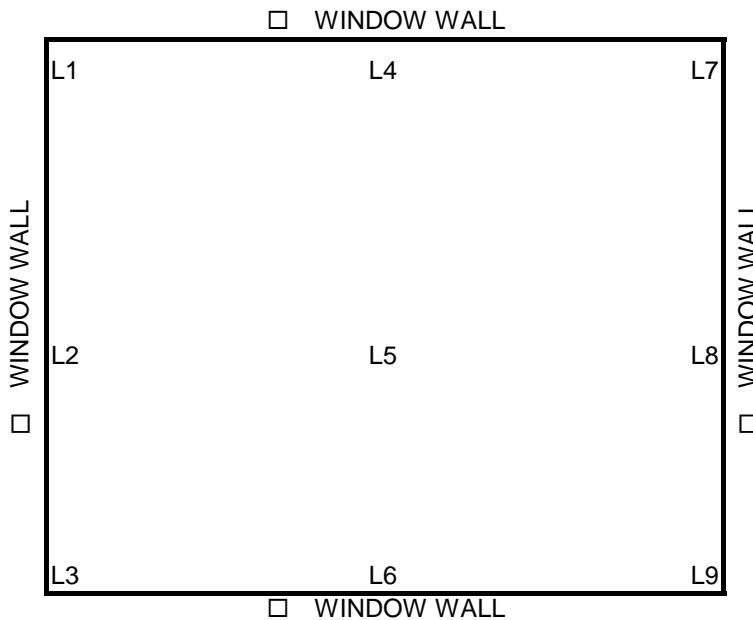
Classroom Observations:

LIGHTING CLASSROOM INFORMATION

RECORDED ILLUMINATION LEVEL DATA				
MEASUREMENT LOCATION	TIME OF DAY			
	EARLY AM TIME:	LATE AM TIME:	EARLY PM TIME:	LATE PM TIME:
L1: ROOM SIDE - FRONT				
L2: ROOM SIDE - CENTER				
L3: ROOM SIDE - REAR				
L4: ROOM FRONT - CENTER				
L5: CENTER OF ROOM				
L6: ROOM REAR - CENTER				
L7: ROOM SIDE - FRONT				
L8: ROOM SIDE - CENTER				
L9: ROOM SIDE - REAR				

NOTE: CHECK THE APPROPRIATE BOX ON THE DIAGRAM BELOW TO INDICATE THE LOCATION OF WINDOW WALLS

FRONT OF ROOM (INSTRUCTIONAL WALL)

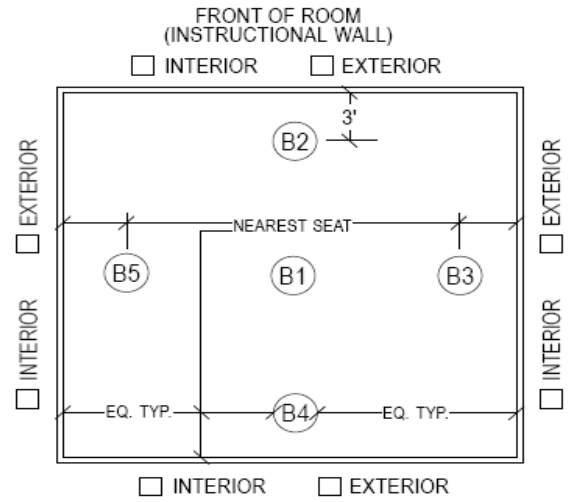


Classroom Observations:

ACOUSTICS - BACKGROUND NOISE

CLASSROOM INFORMATION

BACKGROUND NOISE MEASUREMENT DATA		
MEASUREMENT LOCATION	MEASURED A-WEIGHTED LEVEL	
	HVAC on	HVAC off
B1: MIDDLE OF ROOM (REQUIRED)		
B2: FRONT OF ROOM (OPTIONAL*)		
B3: ROOM SIDE (OPTIONAL*)		
B4: REAR OR ROOM (OPTIONAL*)		
B5: ROOM SIDE (OPTIONAL*)		



*REQUIRED IF NEAREST TO HVAC RETURN INLET

MEASUREMENT PROCEDURE CHECKLIST

- VERIFY HVAC SYSTEM IS ON/OFF
- CLOSE DOORS AND WINDOWS
- VERIFY THAT UNUSUAL BACKGROUND NOISE IS NOT PRESENT (E.G. VACUUMS, FLOOR POLISHERS, ETC.)
- VERIFY SOUND LEVEL METER CALIBRATION
- OBSERVE AND RECORD AVERAGE SOUND LEVEL AT REQUIRED LOCATION B1
- OBSERVE AND RECORD AVERAGE SOUND LEVEL AT LOCATION NEAREST TO THE RETURN INLET
- OBSERVE AND RECORD AVERAGE SOUND LEVELS AT REMAINING OPTIONAL MEASUREMENT LOCATIONS
- NOTE LOCATION OF RETURN AIR INLET ON ROOM DIAGRAM ABOVE

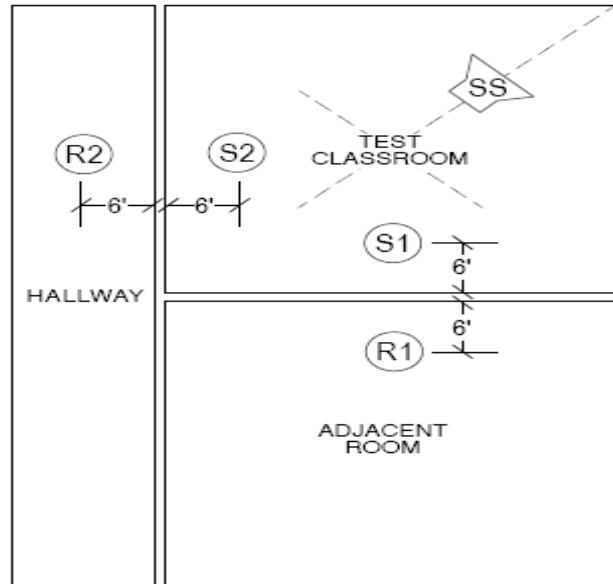
Classrooms Observations:



ACOUSTICS - SOUND INSULATION

CLASSROOM INFORMATION

SOUND INSULATION MEASUREMENT DATA		
MEASURED VALUE OR CALCULATED DIFFERENCE	NG ROOM SOUND PATH (S1, R1)	HALLWAY SOUND PATH (S2, R2)
SOURCE MEASURED LEVEL (dBA)	=S1	=S2
RECEIVED MEASURED LEVEL (dBA)	=R1	=R2
A-WEIGHTED SOUND REDUCTION (dB)	=S1 - R1	=S2 - R2
BACKGROUND NOISE AT R1 AND R2 (dBA, NOISE SOURCE OFF)		



MEASUREMENT PROCEDURE CHECKLIST

- VERIFY HVAC SYSTEM IS OFF
- CLOSE DOORS AND WINDOWS
- VERIFY THAT UNUSUAL BACKGROUND NOISE IS NOT PRESENT (E.G. VACUUMS, FLOOR POLISHERS, ETC.)
- VERIFY SOUND LEVEL METER CALIBRATION
- ACTIVATE NOISE SOURCE
- OBSERVE AND RECORD AVERAGE SOUND LEVEL AT SOURCE LOCATIONS S1 AND S2
- OBSERVE AND RECORD AVERAGE SOUND LEVEL AT RECEIVE LOCATIONS R1 AND R2
- MUTE NOISE SOURCE
- OBSERVE AND RECORD AVERAGE BACKGROUND NOISE LEVEL AT RECEIVE LOCATIONS R1 AND R2

Classroom Observations:



ACOUSTICS - REVERBERATION

CLASSROOM INFORMATION

REVERBERATION MEASUREMENT DATA			
OCTAVE BAND CENTER FREQUENCY (HZ)	REVERBERATION TIME (RT60) MEASUREMENTS	REVERBERATION TIME RT60	
		MEASUREMENT LOCATION	
		R1**	R2
500	MEASUREMENT 1 (REQUIRED)*		
500	MEASUREMENT 2 (OPTIONAL)		
500	MEASUREMENT 3 (OPTIONAL)		
1000	MEASUREMENT 1 (REQUIRED)*		
1000	MEASUREMENT 2 (OPTIONAL)		
1000	MEASUREMENT 3 (OPTIONAL)		
2000	MEASUREMENT 1 (REQUIRED)*		
2000	MEASUREMENT 2 (OPTIONAL)		
2000	MEASUREMENT 3 (OPTIONAL)		

MEASUREMENT PROCEDURE CHECKLIST

- VERIFY HVAC SYSTEM IS OFF
- CLOSE DOORS AND WINDOWS

- VERIFY THAT UNUSUAL BACKGROUND NOISE IS NOT PRESENT (E.G. VACUUMS, FLOOR POLISHERS, ETC.)

- MEASURE A-WEIGHTED BACKGROUND NOISE LEVEL AT MEASUREMENT LOCATIONS R1 AND R2 (SOUND SOURCE OFF)

- VERIFY SOUND SOURCE "SS" OPERATION AND MEASURE A-WEIGHTED SOUND LEVEL; ADJUST LEVEL TO AT LEAST 40 dB GREATER THAN MEASURED BACKGROUND NOISE LEVEL

- OBSERVE AND RECORD REVERBERATION TIMES AT MEASUREMENT LOCATIONS R1 AND R2 (MUTE SOUND SOURCE AS REQUIRED)

- RECORD ANY NOTES REGARDING MEASUREMENT CONDITIONS:

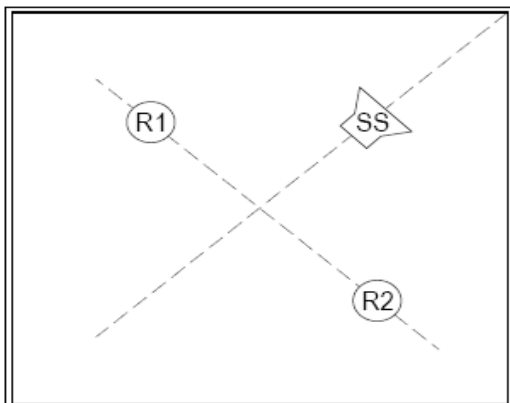
SIGNAL-TO-NOISE MEASUREMENTS	SOUND LEVEL (dBA)	
SOURCE SOUND LEVEL		
BACKGROUND NOISE LEVEL		

* OR INSTRUMENT GENERATED AVERAGE OF AT LEAST THREE MEASUREMENTS

CHECK IF INSTRUMENT AVERAGE AT EACH POSITION

** OR INSTRUMENT GENERATED AVERAGE OF MINIMUM SIX MEASUREMENTS (THREE AT EACH POSITION)

CHECK IF INSTRUMENT AVERAGE AT EACH POSITION



Classroom Observations:



INDOOR AIR QUALITY CLASSROOM INFORMATION

OUTDOOR MEASUREMENTS			
TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CARBON MONOXIDE (ppm)	CARBON DIOXIDE (ppm)
START OF DAY			
END OF DAY			

INDOOR MEASUREMENTS							
TEMPERATURE (°F)		RELATIVE HUMIDITY (%)		CARBON MONOXIDE (ppm)		CARBON DIOXIDE (ppm)	
Return	Supply	Return	Supply	Return	Supply	Return	Supply

OBSERVATIONS:

1) Are windows/doors open to outside air?
 Yes
 No

2) Describe HVAC system:
 Fan coil
 Heat pump / packaged unit
 Central system
 Displacement
 Other

3) Describe HVAC fan location:
 In adjacent space
 Above ceiling
 On roof
 Through-wall in room
 Corner closet
 Exposed in room
 Remote (central HVAC)

4) Describe location of compressor or chiller:
 Packaged in-fan unit
 In adjacent space
 In ceiling
 On roof
 Remote (central HVAC)

5) Is supply ductwork:
 Exposed
 Concealed

6) Is the fan return:
 Ducted
 Unducted

7) Seals on the doorframe head and jambs include:
 Smoke seal
 Stop-applied compression

8) Describe any seals on the corridor door bottom:
 Sweep seal
 Automatic door-bottom

9) Is this classroom separated from adjacent classrooms by an operable partition?
 Yes
 No

10) If there is a partition, has a clear area been maintained along its face on both sides? (ie: no desks, shelves, etc)
 Yes
 No

11) If there is a partition, are there posters, art charts, etc., posted across panel joints?
 Yes
 No

12) Which mode is the classroom currently in?
 Heating
 Cooling
 Natural Ventilation

13) MERV rating of air filters that supply room: _____

14) Number of filter changes per year: _____

Classroom Observations: _____

