



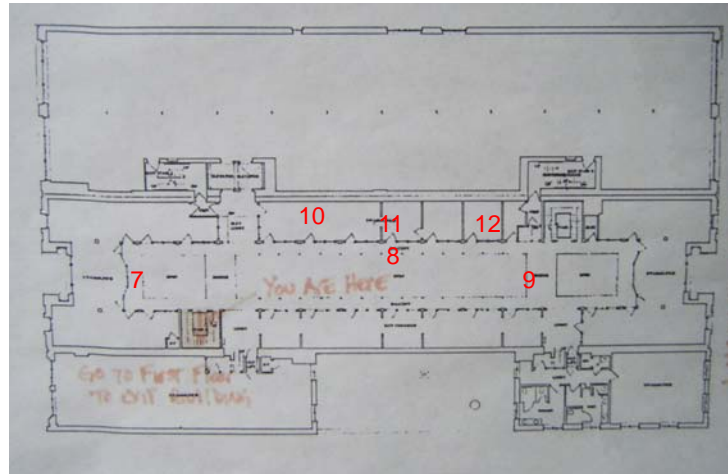
## HOT AND LOUD

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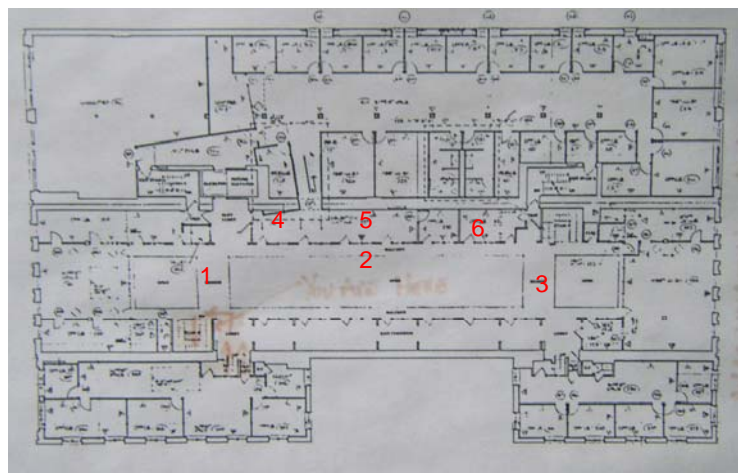
## Hypotheses

- Average temperature decreases 2 degrees F with each descending floor level.
- The temperature difference (between the gallery and atrium space) decreases with each descending floor by 2 degrees F.

## Second Floor Hobo Placement



## Third Floor Hobo Placement



# Surface Temperatures

First Floor			
	West	Middle	East
Outside Gallery Ledge (Atrium)	69 degrees F	71.5 degrees F	71.5 degrees F
Inside Gallery Ledge	n/a	69 degrees F	71 degrees F
Gallery Wall	n/a	69 degrees F	70.5 degrees F

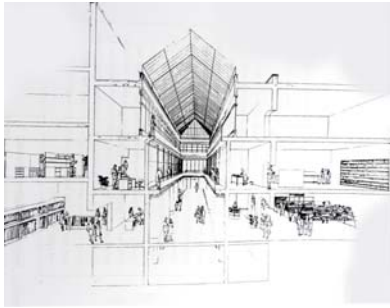
Atrium Glass Roof East Side- 80 degrees F  
 Atrium Glass Roof West Side- 78 degrees F

Second Floor			
	West	Middle	East
Outside Gallery Ledge (Atrium)	75 Degrees F	77.5 degrees F	77 degrees F
Inside Gallery Ledge	73 degrees F	73.5 Degrees F	74 degrees F
Gallery Wall	73 degrees F	71.5 degrees F	72.5 degrees F

Third Floor Sensors			
	West	Middle	East
Outside Gallery Ledge (Atrium)	68 degrees F	76 degrees F	78 degrees F
Inside Gallery Ledge	61 degrees F	66 degrees F	70 degrees F
Gallery Wall	68 degrees F	63 degrees F	68 degrees F

# Wind Velocity

	First Floor	Second Floor	Third Floor
West End	3	2	7
Middle	1	1	1
East End	0	1	2
Gallery	2	0	1



## Acoustic Results

- Atrium
  - ▣ 60-61db
- Third Floor
  - ▣ Middle Gallery Space-53-54 dB
  - ▣ Gallery Entrance-59-60 dB
  - ▣ Third Floor Atrium-63dB
- Theatre
  - ▣ 40-45 dB
- Elevator
  - ▣ 63-64 dB

### Appropriate Acoustical Range

Office Spaces/ Restaurants – 45-60 dB

Theatre- 35-40 dB



## Acoustical Survey

### Questions Asked

- 1.) On a scale from one to ten what is the level of loudness of this space?
- 2.) On a scale from one to ten what is the annoyance level of this space?
- Results
  - ▣ On the third level people that rated the loudness over a 5 and the annoyance number would be typically higher than the loudness number
  - ▣ Results showed that it was quieter on first floor and the annoyance number was usually lower than loudness number.