

MECHANICAL, ELECTRICAL SPACE PROGRAMMING

Space Requirements: Following are floor space, floor-to-ceiling height and ceiling-to-structure height requirements for mechanical/electrical equipment for various building types as classified on the basis of diversified and undiversified maximum airflow rates.

Diversified Maximum Airflow Rate (i.e. Total of Maximum Airflow Rates through all Air Handling Units):

| <u>< 1.0 CFM/GSF</u> <u>(Office/Classroom Bldg.)</u> | <u>1.0-1.5 CFM/GSF</u> <u>(Lt. to Med. Lab Bldg.)</u> | <u>> 1.5 CFM/GSF</u> <u>(Hvy. to X-Hvy. Lab Bldg.)</u> |
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| 1.* 10% of GSF for Mechanical | 12.5% of GSF for Mechanical | 15% of GSF for Mechanical |
| 2.* 1% of GSF for Electrical | 1.5% of GSF for Electrical | 2% of GSF for Electrical |
| 3.* 12 Ft. Floor-to-Structure | 14 Ft. Floor-to-Structure | 16 Ft. Floor-to-Structure |

Undiversified Maximum Airflow Rate (i.e. Total of Maximum Airflow Rates through all Room Terminal Units):

| <u>< 1.5 CFM/GSF</u> <u>(Office/Classroom Bldg.)</u> | <u>1.5-2.0 CFM/GSF</u> <u>(Lt. to Med. Lab Bldg.)</u> | <u>> 2.0 CFM/GSF</u> <u>(Hvy. to X-Hvy. Lab Bldg.)</u> |
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| 4.* 3 Ft. Ceiling-to-Structure | 4 Ft. Ceiling-to-Structure | 5 Ft. Ceiling-to-Structure |

* Description of Individual Line Items Above:

1. The minimum acceptable percentage of the overall building GSF to be utilized for **mechanical equipment rooms** (excluding vertical duct/pipe shafts/chases).
2. The minimum acceptable percentage of the overall building GSF to be utilized for **electrical equipment rooms** (excluding riser shafts and panel closets).
3. The minimum acceptable dimension from the floor to the lowest overhead structural component to accommodate the installation of central station equipment and associated system components on the **primary equipment room level(s)** of a building.
4. The minimum acceptable dimension of the clear space from the top of the ceiling to lowest overhead structural component to accommodate the installation of ventilation ductwork and other mechanical/electrical system components on the **other level(s)** of a building.

Additional Space Requirements: The mechanical floor space requirements indicated above apply to buildings served by central distributed steam and chilled water utilities. If boiler(s) and/or chiller(s) are located within a building, these numbers shall be increased accordingly. Similarly, in cases where an emergency generator, multi-building load center or electrical distribution center is housed within a building, the electrical equipment floor space requirement indicated above shall be increased by the amount required for each of these systems.